Petroleum Resources Division
Annual Summary of Operations

1981

Province of
British Columbia
Ministry of
Energy, Mines and
Petroleum Resources

INTRODUCTION

This report presents the contribution of the Petroleum Resources Division to the 1981 Annual Report of the Ministry of Energy, Mines and Petroleum Resources, which will be published later in 1982. The information is made available at this time to provide earlier release of compiled data to the industry and other interested persons.

This report is divided into three sections (1) Petroleum Resources Division Organization, (2) Review of Petroleum Industry, and (3) Highlights of Division Activities. In addition, there is a series of tables and illustrations providing important information on the petroleum industry operations in 1981.

TABLE OF CONTENTS

		Page
INTRODUCTION		3
DIVISION ORGANIZATION		7
	Engineering Branch	7
	Geological Branch	7
	Titles Branch	8
	Offshore Administration Branch	8
	Staff	8
THE PETROLEUM INDUSTRY IN 1981		10
	Drilling	10
	Production	10
	Field Activity	11
	Exploration and Development	12
	Land Disposition	13
HIGHLIGHTS OF PETROLEUM RESOURCES DIVISION ACTIVITIES		14
	Legislation	14
	Mediation and Arbitration Board	14
	Engineering Branch	14
	Geological Branch	17
	Titles Branch	20
	Offshore Administration Branch	21
STATISTICAL TABLES		
P 1	Hectares of Crown Petroleum and Natural Gas Rights Held, 1970–1981	23
P 2	Petroleum and Natural Gas Revenue, 1947–1981	23
P 3	Established Hydrocarbon and By-product Reserves, December 31, 1981	24
P 4	Drilling and Production Schemes Approved in 1981	25
P 5	Wells Drilled and Drilling, 1981	26
P 6	Summary of Drilling and Production Statistics, 1981	31
P 7	Monthly Crude Oil and Condensate Production by Fields and Pools, 1981	32
P 8	Monthly Non-associated and Associated Gas Production by Fields and Pools, 1981	37
P 9	Monthly Supply and Disposition of Crude Oil/Pentanes Plus, 1981	48
P10	Monthly Supply and Disposition of Natural Gas, 1981	50
P11	Monthly Supply and Disposition of Propane, 1981	52
P12	Monthly Supply and Disposition of Butane, 1981	53
P13	Monthly Supply and Disposition of Sulphur, 1981	54
P14	Crude-oil Pipelines, 1981	54
P15	Crude-oil Refineries, 1981	55
P16	Natural Gas Pipelines, 1981	56
P17	Gas-processing Plants, 1981	59
P18	Sulphur Plants, 1981	60

TABLE OF CONTENTS—*Continued*

Page

ILLUSTRATIONS

P19 Metres Drilled in British Columbia 1947–1981 61
P20 Northeastern British Columbia Oil and Gas Fields 62
P21 Wells Drilled in British Columbia, 1966–1981 63
P22 Geophysical Crew Weeks in British Columbia, 1966–1981 64
P23 Oil Production in British Columbia, 1955–1981 65
P24 Gas Production in British Columbia, 1955–1981 66
P25 Pipelines and Sedimentary Basins of British Columbia 67

DIVISION ORGANIZATION

The Petroleum Resources Division, under the general direction of Assistant Deputy Minister, R. W. Durie, Division Head, administers the *Petroleum and Natural Gas Act* and the regulations made thereunder including the Drilling and Production Regulations, the Geophysical Regulations, the Drilling Licence Regulations, and the Development Road Regulations. It also administers the *Petroleum Underground Storage Act*. Therefore, the Division is responsible for all matters related to the disposition of Crown-owned petroleum and natural gas rights as well as the regulation of the exploration, development, and production phases of the oil and gas industry.

The Division is made up of four Branches, namely, the Engineering and Operations Branch, the Geological Branch, the Titles Branch, and the Offshore Administration Branch.

ENGINEERING BRANCH

The Engineering Branch, under the Director, Engineering and Operations, A. G. T. Weaver, is responsible for all engineering and operational activities of the Petroleum Resources Division.

There are three main functions:

(1) Enforcement of the Drilling and Production Regulations under the *Petroleum and Natural Gas Act*, together with provision of advice to the Minister with respect to applications made by industry under the Act.

(2) Collection, filing for Division and public use, and publication of drilling and production statistics, production and disposition data, reservoir and pool performance data.

(3) Reservoir analysis of all oil and gas pools in the Province, including maintenance of current production rate forecasts together with data concerning reserves discovered to date and estimates of potential reserves growth.

(4) Providing advice to other government agencies on petroleum industry matters.

The Development Engineering Section, under the supervision of Senior Development Engineer W. L. Ingram, licences drilling and service rigs, issues well authorizations, and maintains detailed records pertaining to all drilling and production operations.

The Reservoir Engineering Section, under Chief Reservoir Engineer B. T. Barber, is concerned with all reservoir engineering aspects of the Branch's activities. The Section is responsible for determination of reservoir and production characteristics of oil and gas pools in the Province. This involves interpretation of reservoir pressure, rock and fluid properties, and production data. These parameters are used to forecast ultimate recoveries obtainable from oil and gas accumulations in the Province, and the rates at which these volumes will be produced. Oil and gas allowable rates are set by the Section, and recommendations concerning proposed improved recovery and produced fluid disposition schemes are made.

The District Office (Drilling and Production Section) located in Charlie Lake is under Manager—Field Operations D. L. Johnson. The District organization consists of a field inspection group, a project and geophysical group, a core storage group and secretarial staff. The District represents the Petroleum Resources Division in the field and is responsible for enforcement of regulations in drilling and production operations and liason with industry and other Ministries. It also collects reservoir and other data, carries out studies of operating procedures and maintains core and drill sample storage and examination facilities.

GEOLOGICAL BRANCH

The Geological Branch consists of two sections, under Director of Geology, W. M. Young, and is responsible for all geological activities of the Petroleum Resources Division. The Branch is accountable for the collection, compilation, and assessment of

geological and related information concerned with the exploration for and development of petroleum resources within producing and non-producing areas of the Province; assisting in the framing of development procedures to ensure conservation and the best returns from these resources; estimating the remaining undiscovered petroleum resources used for the prediction in forecasts of oil and gas production; and providing data and opinions to attract, assist, and encourage industry in the development of the Province's petroleum resources.

The Economic Geology Section, under the supervision of Senior Economic Geologist J. A. Hudson, is responsible for the coordination and direction of projects concerned with regional mapping and the assessment of undiscovered petroleum resources.

The Reservoir Geology Section, under the supervision of Senior Reservoir Geologist R. Stewart, is responsible for the coordination and direction of projects concerned with the detailed mapping and assessment of discovered petroleum resources.

TITLES BRANCH

The Titles Branch consists of three sections under the direction of Commissioner Wilfred J. Quinn. The Branch is responsible for administering those parts of the *Petroleum and Natural Gas Act* and essential regulations relating to and affecting title to Crown petroleum and natural gas rights. In addition, the Branch administers the Crown petroleum and natural gas rights dispositions held during each year.

The Lease Administration Section, under the Manager, Land Administration, G. German, is responsible for the issuing of petroleum and natural gas permits, leases, drilling licences, etc. The Section is also responsible for recording transfers of title as well as encumbrances that are received and approved. In addition, geophysical licences, notice of commencement of exploratory work, affidavits of work and unit agreements are approved and processed.

The Revenue Section, under the Senior Accounting Clerk, D. Fraser, is responsible for the collection and accounting of all petroleum and natural gas revenue payable to the Crown under the provisions of the *Petroleum and Natural Gas Act* with the exception of oil royalties and natural gas revenue from sales. The Section also receives and accounts for security deposits that are required under the Act or regulations.

The Draughting Section, under the Senior Draughting Technician, S. H. Lowe, is responsible for preparing and updating, on a continuing basis, all scales of title maps, including plats which are affixed to each title document, seismic road and trail maps, and petroleum development road maps. The Section is also responsible for the preparation of maps used at the dispositions of petroleum and natural gas rights and for miscellaneous draughting requirements as required.

OFFSHORE ADMINISTRATION BRANCH

The Offshore Administration Branch, under Director P. Z. R. Finkle, was formed to administer the Province's interests in petroleum developments off the west coast of British Columbia.

In March 1981 this Branch was established to develop the British Columbia policies on offshore oil and gas activities, and to coordinate the preparation and planning in this Ministry and others in anticipation of resumption of exploration on the British Columbia coast. Even though exploration activities may be several years away, experience elsewhere in the world has shown that careful and deliberate planning at the earliest possible time is important to achieve the optimum benefits from offshore development, while minimizing the detrimental effects.

STAFF

On December 31, 1981, the professional and senior staff included the following:

Assistant Deputy Minister, R. W. Durie, P.Eng. ..... Division Head

ENGINEERING BRANCH

A. G. T. Weaver, P.Eng.	Director, Engineering and Operations
W. L. Ingram, P.Eng.	Senior Development Engineer
M. B. Hamersley, C.E.T.	Development Technician
W. Duncan	Administrative Supervisor
B. T. Barber, P.Eng.	Chief Reservoir Engineer
P. S. Attariwala, P.Eng.	Reservoir Engineer
Vacant	Reservoir Engineer
Vacant	Reservoir Engineer
P. K. Huus	Reservoir Technician
J. H. Burt	Reservoir Technician
D. L. Johnson, P.Eng.	Manager—Field Operations
D. E. Krezanoski, P.Eng.	Field Engineer
D. A. Selby	Field Technician
G. T. Mohler	Field Technician
B. Baraniski	Field Technician
W. L. Cowger	Field Technician
A. W. Beach	Field Technician
D. J. Stewart	Field Technician
R. D. McLeod	Field Technician
L. London	Geophysical Technician
Vacant	Geophysical Technician

GEOLOGICAL BRANCH

W. M. Young, P.Eng.	Director of Geology
R. Stewart, P.Eng.	Senior Reservoir Geologist
T. B. Ramsay, P.Eng.	Reservoir Geologist
J. J. English	Reservoir Geologist
J. A. Hudson, P.Eng.	Senior Economic Geologist
K. A. McAdam	Economic Geologist

TITLES BRANCH

W. J. Quinn	Commissioner
G. German	Manager, Land Administration
C. Magee	Senior Administrative Clerk
D. Fraser	Senior Accounting Clerk
S. H. Lowe	Senior Draughting Technician

OFFSHORE ADMINISTRATION BRANCH

P. Z. R. Finkle	Acting Director
J. H. Hansen	Senior Economic Advisor

Staff Changes

L. Pepperdine, Reservoir Engineer resigned April 15, 1981. G. German was transferred from the Division Charlie Lake office to the Titles Branch, Victoria, on November 1, 1981. P. Z. R. Finkle and J. H. Hansen formed the Offshore Administration Branch.

THE PETROLEUM INDUSTRY IN 1981

A severe downturn in all aspects of exploration for oil and gas in British Columbia occurred in 1981. The drilling activity during the first three months of 1981 was less than for the same time period in recent years and, following the spring breakup, was drastically reduced for the balance of the year. Annual production of natural gas decreased by 6.1 per cent while oil production recorded a slight 1.7 per cent rise in comparison to 1980. Similarly the proceeds from land disposition were decreased 66 per cent and the geophysical activity experienced a 40 per cent drop.

The following are tabulations of petroleum industry fiscal data for 1981:

Value of Production

	$
Crude Oil	235 559 762
Field Condensate	3 224 675
Marketable natural gas	620 423 303
Gas plant liquids	28 388 606
Total	**887 596 346**

Provincial Revenue from Petroleum Industry

Rentals and fees	27 334 016
Crown reserves dispositions	60 776 403
Royalties (oil, gas, and products)	55 640 158
Gas revenue from B.C. Petroleum Corporation	158 000 000
Total	**301 750 577**

During 1981 the petroleum industry was adversely affected by economic factors brought about by the provisions of the federal National Energy Plan of October 1980, inadequate cash net-backs from production and a softening of the gas export market. A major step toward alleviating these problems was taken in the British Columbia/Canada agreement on prices of September 1981. However, several additional measures must be taken by governments before a reversal in the petroleum industry activity can be expected. The British Columbia government is working on such measures which should be implemented in 1982.

The effect of the current adverse economies on petroleum field activity in 1981 is shown in statistical data which follow in this report.

DRILLING

Very significant decreases were noted in all phases of drilling operations. The number of wells drilled declined 45 per cent to 211; wells spudded dropped 47 per cent to 195; and only 174 well authorizations were issued, down 53 per cent compared to 1980. The number of metres drilled reflected these decreases as 410 613 metres were drilled in 1981 compared to 687 942 metres in 1980. There were 27 oil wells completed in the year, two less than for 1980. However only 101 gas well completions were made relative to 220 in 1980. Similarly the abandonments dropped from 130 to 85, a decline of 35 per cent.

All types of drilling reported decreases but most noticeable was the drop in Development-type drilling. This phase was 51 per cent below 1980 while Exploratory Wildcat-type drilling declined 29 per cent.

PRODUCTION

Oil production for 1981 showed a slight increase over 1980 as 2 035 953 m^3 were produced compared to 2 002 128 m^3 produced in 1980. Producing oil wells at the end of the respective years was 591 and 588. The largest producing oil fields were Boundary

Lake, 743 548 m^3; Eagle, 443 414 m^3; Inga, 174 060 m^3; and Peejay, 135 930 m^3. The increase was due primarily to the Eagle field which for the second consecutive year improved production as development continued in this active area.

The non-associated raw gas production for 1981 was 7 992 233 10^3m^3 down 6.8 per cent from 1980. The largest producing gas field was Yoyo, 1 206 816 10^3m^3; Clarke Lake, 935 864 10^3m^3; Sierra, 770 072 10^3m^3; and Laprise Creek 521 183 10^3m^3. The number of producing gas wells at the end of 1981 was 562 compared to 604 at the end of 1980.

Six applications by industry to convert wells to salt-water disposal service were approved in the Junior, Nig Creek, Siphon, and Wilder fields and in the Aspen and Commotion areas.

An application for Good Engineering Practice (GEP) was approved in the Cabin Slave Point 'A' pool. Applications for concurrent production of oil and gas were approved for Stoddart West North Pine 'A' pool and the Stoddart South Belloy 'C' pool. All concurrent production approvals were conditional on conservation of gas production.

Ministry staff assisted the British Columbia Utilities Commission at three applications to have the British Columbia Petroleum Corporation declared a common purchaser of natural gas in the Boundary Lake North Halfway 'E' pool, Buick Creek Bluesky 'C' pool and the Jedney Baldonnel 'A' and Halfway 'A' pools. The assistance provided by the Ministry staff consisted of conducting cross-examination of applicants and intervenors on technical evidence presented at the public hearings and making recommendations to the Commission concerning the disposition of the applications with supporting analysis of the evidence.

An application for new oil royalty rates for incremental production from an upgrading of the waterflood in Milligan Creek Unit No. 1 was approved with the agreement of Mineral Revenue Division. Royalty on total production will be levied according to the old oil schedule until a specified volume of royalty oil has been produced and, thereafter, royalty will be levied on total production according to the new oil schedule.

FIELD ACTIVITY

All activities related to the petroleum industry were greatly reduced in 1981. Industry projects continued throughout the year but no significant new ones were undertaken.

During 1981 no uncontrolled blow out occurred, however one incident is worthy of mention. While drilling Esso et al Boundary 14-28-84-14, a highly pressured salt water zone was penetrated at 1 187 metres. This zone was obviously in direct communication with the field water flood and thereby highly pressured. During the subsequent killing and abandonment operations, approximately 4 200 cubic metres of salt water flowed to surface. It was contained on the lease within the drilling sump and additional containment pits. This produced water was transferred to the main Boundary Lake battery for disposal back into the water flood system. The well that caused the difficulties was satisfactorily abandoned and the rig was moved approximately 25 metres, to drill a replacement well in A 14-28-84-14.

During 1981 several oil spills and related fires occurred. An apparent 500 cubic metres of oil were spilled at the Suncor Blueberry Main Battery. This spill was the result of a piping modification error associated with changes at the battery. It allowed oil to drain from the storage tanks into an nearby abandoned header. The spilled oil migrated down a side hill and into Alexander Creek. As the creek was completely frozen at this time, clean-up operations were easily effected. The second oil spill also showed negligence on behalf of the operating company when approximately 30 cubic metres of oil were spilled at the Norcen Eagle 8-5-85-18 battery. The spill was the result of an electrical actuator becoming unfastened on the Norcen pipleline shipping pump. The oil spilled into the dyke area surrounding the battery and was then drained outside the dyke area via a drain pipe that had been placed in the dyke wall. This drain pipe did not include a valve or stand pipe assembly which made the dyke useless for the containment of oil.

A fire was started at the Suncor Blueberry d 92 L battery by an open flame space heater during a compressor site modification. The heater was being used to warm the gas dehydration building while workers made their modifications. One person working inside the building suffered minor facial burns, and may have incurred hearing damage due to the explosion. Another worker outside heard shouting from inside the building and when he opened the door gas fumes ignited. The subsequent explosion blew and landed him on his back approximately 10 metres from the door. It appeared the source of gas inside the building was due to a valve on the sales line which although shut-in, was not blanked off, allowing gas to bleed back into the building.

The second major fire occurred during August at the Norcen Eagle 8-5-85-18 battery. It appeared that the fire started when oil and gas which had escaped from a ruptured sight glass on the treater sprayed onto the flare stack of the treater. All wells producing to the battery were shut in immediately, so that loss was confined to the treater building, separators, and ancillary piping. The fire did not spread to the oil storage tanks. Due to delays in equipment delivery it was decided not to rebuild the battery at this site, but to re-route the production to the main unit battery at Eagle 2-1-85-19.

Major battery modifications were completed during 1981 to the Kildonan Buick Creek Battery. The four wells and battery operated by Kildonan Oil Ltd. had been shut down since July 1979 by a court injunction after a leak of oil and hydrogen-sulphide bearing gas from one of the wells. The injunction was granted to the Blueberry Indian band who live nearby. This order was eventually lifted after an appeal by Kildonan. One of the conditions for lifting the injunction was that the Division would specify the requirements for the safe operation of the wells and battery.

In view of the emotion and publicity involved with this operation, the requirements specified by the Division were far more stringent than normal. These included moving the battery over a mile farther from the Indian reserve and installing shut-in valves in the tubing and flow lines. The objective was to be able to close down production in the event of uncontrolled flow and automatically shut-in the wells and the battery by a sensor mechanisn when the concentration of hydrogen-sulphide in the atmosphere reached a certain level. In addition an emergency plan was developed to evacuate the nearby residents, if considered necessary.

During February 1981 operations were resumed at the battery after inspections by the Drilling and Production section. The battery operated continuously for the remainder of 1981 and to date there had been no complaints from the Indian band.

EXPLORATION AND DEVELOPMENT

A total of 211 wells was completed in the Province during the 1981 calendar year, a considerable decrease from the 385 wells completed in 1980. The total includes three wells in the Nechako area, and two in the Fernie Basin area, all five of which were dry holes. All of the remaining wells were drilled in the northeastern sector of the Province, with the Fort St. John area again receiving the greatest concentration. Other areas receiving attention were Helmet, Tommy Lakes, Deep Basin, and the Foothills, both north and south of the Peace River.

Exploratory outpost and wildcat drilling was down by 38 per cent from 1980, at a total of 149 wells. The decrease in activity is tied directly to the marketing and pricing levels which prevailed during the year, giving the operating companies a reduction in their cash flow available for drilling. The exploratory drilling resulted in one new oil discovery, 49 new gas discoveries and 25 outpost completions to established pools for an overall success ratio of 50 per cent.

Activity on the Jean Marie play in the area northeast of Fort Nelson was notable in the beginning of the year with a series of discovery wells. This gas bearing formation appears to exist over a large area, with the most prolific gas pools occurring in small biohermal type reefal developments. The location of these buildups is often a function of features on horizons at deeper levels. The Tommy Lakes play in the Triassic Halfway

formation located between Fort St. John and Fort Nelson, also received considerable attention, with a success ratio approaching 80 per cent. However, no major gas discoveries were encountered during the year.

Development drilling recorded a sharp decrease, falling by 57 per cent, with only 62 wells drilled, compared to 144 in 1980 of the 62 wells, 47 were completed, 24 as gas successes and 23 as oil for a success ratio of 76 per cent.

The major area of development drilling was the general Fort St. John region, and the only concentration took place in the Eagle Belloy oil field where 12 wells were completed. The Cecil North Pine oil field had three successful oil completions and the Birch Baldonnel field two. Three gas wells were completed in the Tommy Lakes–Trutch Halfway gas region. The other successes were scattered areally and encompassed both Mesozoic and Paleozoic formations.

Geophysical crew weeks in 1981 were down considerably over 1980, despite a good start in the first of the year. The total for 1981 was 281 crew weeks, a drop to 60 per cent of the previous year's effort. The total included considerable exploration in the Nechako Basin west of the town of Quesnel during the summer months.

LAND DISPOSITION

There were seven dispositions of Crown reserve petroleum and natural gas rights held with a total of 443 parcels being offered. Of this number, bids on 316 parcels, consisting of 40 permits, 7 drilling reservations and 269 leases, were accepted covering 599 208 hectares. The seven dispositions realized a total of $60,776,403 in tender bonuses received. A comparison with the previous two years is as follows:

Year	Parcels Offered	Parcels Disposed	Total ha	Tender Bonus	Average Price Per ha
				$	$
1979	741	589	500,796	191,041,605	381.48
1980	735	558	441,297	181,266,804	410.76
1981	443	316	599,208	60,776,403	101.43

The 1981 figures include nine parcels covering 283 014 hectares of petroleum and natural gas rights on the Queen Charlotte Islands, which were disposed of for an average price per hectare of $0.18.

HIGHLIGHTS OF PETROLEUM RESOURCES DIVISION ACTIVITIES

This section describes the highlights of both the technical and administrative work carried out by the Division during the year.

LEGISLATION

During the year a *Geothermal Resource Act* was prepared and presented to the House although it did not receive passage.

The *Petroleum and Natural Gas Act* was also amended during 1981 to remove the term 'commercial' from description of well statuses and to introduce another form of title. This new form, the Drilling Licence, will replace Drilling Reservations and Gas Licences previously issued.

MEDIATION AND ARBITRATION BOARD

The composition of the Mediation and Arbitration Board for the year ended December 31, 1981 changed slightly. John Strain, Langley, B.C., accepted appointment as the fourth member. The Board now consists of D. Ed Smith, Chairman; Cecil Ruddell, Vice Chairman; John Martin and John Strain Members.

The Mediation and Arbitration Board is established under Part 3 of the *Petroleum and Natural Gas Act*. Its authority and powers are covered by Sections 6 to 32 inclusive. These sections empower the Board to:

(a) Grant Right of Entry to oil and gas companies over alienated lands where such Entry has been refused by the landowner.

(b) Determine conditions for Right of Entry and set compensation to be paid therefor.

(c) To appoint a Member of the Board to act as a Mediator between a petroleum company and a landowner when an impasse develops respecting Right of Entry.

(d) If Mediation proves unsuccessful, to convene an Arbitration Hearing, receive exhibits and hear evidence from both applicant and respondent prior to determining the compensation for Right of Entry respecting well-site, campsite, roadway and/or pipeline installations.

(e) When requested, to conduct Arbitration Hearings to review and set annual rental on leases and previous Board Orders of more than five year's duration.

(f) To terminate Right of Entry when an operator ceases to occupy land and a Certificate of Restoration has been issued by the Ministry. To amend or rescind Orders from time to time, as circumstances and conditions dictate.

During 1981 the Board conducted numerous field surveys and on-site inspections. They issued 6 Right of Entry Orders and settled 8 others by Mediation and Arbitration and awarded the compensation for 4 surface leases, 3 pipeline easements, and 1 rental renegotiation. Eighty-three other surface lease rental renegotiations were settled by Mediation. The Board rescinded, terminated, or amended 12 Orders.

A booklet was published to assist both the Petroleum companies and the landowners of British Columbia in negotiating private settlements on the surface lease, easement or right-of-way required to allow the company to carry out its work, and provide the landowner with a contract compensating him for the use of his land. This booklet, which is available from the Ministry of Energy, Mines and Petroleum Resources or the office of the Mediation and Arbitration Board, will be updated from time to time as required.

ENGINEERING BRANCH

Although there was a sharp decline in drilling activity in the Province after winter programs were completed in March, the work load of Engineering Branch shows a

definite increase. Much of this increase was brought about by problems referred to the Branch by other ministries and agencies through overlapping regulatory responsibilities and by the involvement in projects undertaken by the Energy Division of this Ministry. This work could not be deferred. At the same time the Branch was well below its authorized professional staff level through difficulties in recruiting and the classification of positions. At the end of the year three key positions still remained to be filled.

In view of this several important projects planned for 1981 had to be deferred in order that the standard regulatory responsibilities of the Branch could be carried out satisfactorily. Good progress was made, however, on other studies including an update of drill site accessibility maps, a new production computer system and a study of Provincial oil producing capability. Branch staff also gained a growing familiarity with the technical aspects of geothermal resources which are under consideration as a new source of energy in the Province.

Development Engineering

The Development Engineering Section is responsible for the administration of all matters related to the location, drilling, completion, and abandonment of wells. This involves the assurance that operators of all wells located, drilled, and produced conform with the Drilling and Production Regulations and submit the required applications, reports and information to the Division.

Approval of well authorizations to drill proposed well locations is granted by the Section after review and references to the Titles and Geological Branches. There were 174 well authorizations issued, 195 less than during 1980. Throughout the life of a well the status, well name, or classification may be changed as circumstances require. During the year statuses were changed on 161 occasions, well names on 120, and well classifications on 14. Each quarter, descriptions of the oil and gas fields designated by the Division are published and circulated.

In addition to comprehensive well data records, all geological and geophysical reports submitted for work credits as well as the Division correspondence files of the three Branches are maintained by the Section. The microfiche library containing British Columbia well data which is produced by a commercial service company continued to be used by the Division staff. This is supplemented by a set of all logs taken from the British Columbia wells plus the important nearby wells.

The complete rewrite of the computer system that will encompass the monthly production returns and report plus the calculation of royalties was continued throughout the year. It is expected this system will be completed in early 1982 and will greatly assist to present the information in a more meaningful manner.

Each drilling and service rig operating in the Province must have a valid Rig Licence and 68 were renewed while 14 new ones were issued.

District Operations

This section is located in the District Office at Charlie Lake, B.C. which is in the Peace River District of northeastern British Columbia.

During 1981, drilling activity declined considerably in comparison to 1979 and 1980. Consequently only 232 550 kilometres were driven by the petroleum inspectional staff to ensure compliance at the field level with various provisions of the Drilling and Production regulations. The field inspection component and the geophysical and project group started the year at nearly full staff. However, during the year two senior staff members left the service. By year-end, replacement staff had been selected and the staff complement was complete with the exception of a senior drilling technician.

To assure compliance to gas conservation orders and to assess that good engineering practices are employed at the oil and gas production facilities, inspections of the batteries were carried out on 582 different occasions.

Being ever aware of the requirements for accurate gas measurement, the associated measurement equipment was monitored throughout the year with fast-metre checks being made on 544 occasions and complete-metre checks on an additional 315 occasions.

To confirm the reliability of the sub surface pressure data that is supplied to the Division by industry, 1,762 calibrations were performed on subsurface pressure guages using the British Columbia Dead Weight which is the standard gauge for the Province. Once again, this gauge was compared to its Alberta counterpart, and both gauges compared within acceptable limits of accuracy. In addition, to supplement and confirm reliability of data received by the Reservoir Engineering Section, 83 static gradients were run and 21 oil well and 14 gas well tests were witnessed.

As the general industry operations slowed down, similarly geophysical field activity declined. Seismic line and crew inspections were carried out on 127 different occasions which was an approximate 40 per cent less than in 1980.

The active drilling rig count started the first quarter of 1981 at high levels but, during the remainder of the year, an average of only 19 wells were drilled per month. Throughout the year inspections were performed on 360 active drill sites, and on an additional 4,800 occasions inspections were made at proposed, producing or abandoned drill sites.

Inspection of salt water disposal systems and the witnessing of segregation tests was emphasized again during 1981. Also during 1981, the Northeastern British Columbia Oil Spill Cooperative enjoyed a very successful year. In April, the cooperative was successful in having the Petroleum Industry Training Service put on an "Oil Spill and Salt Water Clean-up" course in Fort St. John. This was well attended by industry and Division staff. Follow-up training programs and exercises were equally successful. The section also maintained during 1981 active involvement in its role as co-chairman of the oil spill cooperative, and had direct involvement with Proscarac (Prairie Regional Oil Spill Containment and Recovery Advisory Committee) which continued during 1981.

In June of 1981, the cooperative was directly involved with the clean-up of a minor oil spill at the south end of Charlie Lake. The volume of oil involved was unknown but could have been as much as three cubic metres. However as the spill very much appeared to be the result of deliberate michief, the cooperative was asked to commence clean-up operations immediately as the spill site was a recreational area. Clean-up costs incurred by the cooperative were reimbursed by the various oil trucking firms in the area, on a per truck basis.

In September the annual cooperative deployment exercise was conducted on the Beatton River immediately northeast of Fort St. John. The exercise this time took on a new format from previous ones as a helicopter was used to deploy all equipment, thereby simulating a real oil spill in an area inaccessible by road. The exercise consisted of placing peat moss and edible vegetable oil into the river. It was then contained by booms and then recovered with skimmer pumps. The exercise was very successful and gave confidence that the equipment could be quickly dispatched by helicopter to an oil spill in an area inaccessible by road.

In 1981 the District Office updated the maps and descriptive material which had been originally made available in 1977 to define areas in northeast British Columbia which were accessible for drilling during summer months. These maps which had been distributed to industry were a major factor in the upsurge of summer drilling and the more even utilization of drilling rigs. The most significant change to the maps is the corridor afforded by the completion of the 80 mile all weather road system connecting the Clarke Lake, Sieria, Yo Yo, and Junior gas producing areas, 32 miles of which were built by this Ministry. The section also participated in a feasibility study and route selection for an extention of the road system to the Helmet area, about 40 miles to the northeast of Yo Yo.

Other projects developed during 1981 were the review and updating of electrical regulations for drilling rigs. This review included discussions with industry, Alberta officials, and meetings with a committee set up by the Canadian Association of Oil Well Drilling Contractors. At year end the new regulations were in final draft format. The section continued its membership on the Blow-out Prevention Certification and Examination Committee. This committee was asked during 1981 to prepare a certification

program which would be acceptable to the well servicing industry. This task was accomplished early in 1981, and as a result new regulations affecting service rigs are being formulated. Once in regulation form the changes will standardize service rig blow-out prevention systems and make them essentially comparable between the Provinces of Alberta and British Columbia.

Reservoir Engineering

An important responsibility of the Reservoir Engineering Section is to estimate on a continuing basis the oil and gas remaining reserves in British Columbia. Estimates as of 1981 12 31 are shown in Table P3 and are summarized below.

Oil, established	25 509 10^3m^3	(160 524 MSTB)
Natural Gas, established—		
Raw	296 134 10^6m^3	(10 511 BSCF)
Marketable	240 893 10^6m^3	(8 550 BSCF)
Natural Gas Liquids—		
Propane	1 571 10^3m^3	(9 900 MSTB)
Butanes	2 315 10^3m^3	(14 579 MSTB)
Pentanes Plus	4 455 10^3m^3	(28 037 MSTB)
Sulphur	11 319 10^3t	(11 140 MLT)

It may be observed from Table P3 that oil reserves have decreased by 2.14 10^6m^3 (13.4 MMSTB) from estimates at 1980 12 31. Additions due to drilling of 0.14 10^6m^3 (0.9 MMSTB) were insufficient to offset decreases of 0.22 10^6m^3 (1.4 MMSTB) and 2.06^6 10^6m^3 (12.9 MMSTB) due to revisions and production respectively.

Raw gas reserves at the end of 1981 were 7.80 10^9m^3 higher than estimates at 1980 12 31. Additions due to drilling and revisions were 13.84 10^9m^3 and 2.25 10^9m^3 respectively. Production decreased the reserves by 8.29 10^9m^3. The lower growth in reserves and additions due to drilling compared to 1980 are a reflection of the lower drilling activity in 1981.

Forecasts of gas producibility for the period mid-1981 to 2012 were prepared for inclusion in the Ministry's brief to the upcoming Commissioner Inquiry on British Columbia's Requirements, Supply and Surplus of Natural Gas and Natural Gas Liquids of 1982 01 26. In addition, forecasts of producibility of natural gas liquids under shallow-cut (current) and deep-cut conditions were made.

A study to investigate the economics of a carbon dioxide miscible flood in Boundary Lake Unit No. 1 was performed by a consultant on behalf of the Division. The results of the study indicated that estimated recovery would be increased by some 50 per cent (8.5 10^6m^3) over the recovery expected at present. However, due to the anticipated costs of infill drilling from 64 hectares to 16 hectares spacing, the cost of extracting and delivering carbon dioxide from the gas plants at Fort St. John and Fort Nelson and the price and tax structure proposed in the National Energy Plan (1980) the economics of the project did not appear attractive even with reductions in the Provincial royalty levied on tertiary oil. The Division is still optimistic that the economics can be improved and is proceeding with some laboratory work to determine certain properties of carbon dioxide and Boundary Lake crude mixtures in order to test some of the assumptions used in the study.

GEOLOGICAL BRANCH

Economic Geology

The regional mapping coverage was primarily confined to the update of the drillstem test and penetration map series, revised to 1981 04 30. This series is composed of 35 map sheets, on a scale of 1:100 000 and shows, for all wells outside designated field boundaries, the deepest geological formation penetrated, all formation drillstem tests, and the zone or zones in which gas and oil wells are completed. In addition to the latter information and within the designated field limits the penetration map shows drillstem

tests in horizons other than that productive in the field as well as the formation at total depth for wells which have penetrated below the lowest productive horizon within the field.

Published regional sub-surface maps were posted with available data preparatory to contouring. The Top of Middle Devonian Carbonate structure map was prepared for final drafting at year end.

Work continued, as time allowed, on a regional stratigraphic study of correlation and identification of units of the Devonian system; the study will result in the publication of an integrated set of wireline log cross sections in 1982. Various other projects, active during the year, took precedence over the completion of this study. One of these projects was a regional study of the Jean Marie formation, of Upper Devonian age, comprising stratigraphic correlation and wireline log examination for porous intervals involving some 600 boreholes in the 94 I, J, O and P areas. A set of three formational maps was prepared; structural, gross isopachs and isopachs of net porosity. Publication of these is scheduled for midyear 1982. The mapping of the net porosity isopachs was particularly useful in computation of the future undiscovered gas resource figures for the Jean Marie formation.

The estimates of ultimate reserves for the Province were reviewed during the year, with the input from the Economic Geology Section being concerned with estimates of future undiscovered gas resources. The portion of the Province under study was confined to the North East sector. In this regard, discussions were held with representatives of the National Energy Board, the Institute of Sedimentary and Petroleum Geology, part of the Geological Survey of Canada, and the Federal Ministry of Energy, Mines and Resources.

These meetings were held in order to co-ordinate our estimates of future undiscovered resources with the methods of estimation for the whole of Canada, as part of the national resource computations. As a result of the discussions at these meetings, a separate paper entitled "Gas Resources of N.E. British Columbia" was published by the Petroleum Resources Appraisal Secretariat, in Calgary. The resource compilations as developed by the Petroleum Resources Division were used in a submission prepared for the Provincial Gas Supply Hearings to be held in 1982.

Discussions were also held with staff of the Geological Survey of Canada, and the Pacific Geoscience Centre, in regard to the hydrocarbon potential of offshore British Columbia. As the Province's data file on this area is rather limited, most of the input came from the Federal sources. A report on this area, entitled "Hydrocarbon Potential of Offshore British Columbia," GSC open file report 824 was to be published early in 1982. The scarcity of factual subsurface data in the area contributed to the low estimate of potential resources. However interest in the area may be revived should exploration be allowed in the area.

As a result of interest expressed by industry in the oil and gas prospects of the Fraser Valley, and the posting of Petroleum and Natural Gas Permits for bidding, staff of the Ministry made several trips to meet with various municipal councils, regional boards and planning groups. The purpose of these meetings was to discuss various ramifications and possible impacts of the exploration and drilling activity to be expected in the area. However, no acceptable bids were received at the sale, and consequently no exploration activity was carried out in the area.

The *Geothermal Resource Act* was prepared during the year, and has been placed before the Legislature. It is expected the Act will receive the attention of the Legislature at an early date. Considerable interest in this resource has been expressed by industry, and several meetings to discuss the content and intent of this Act were held during the year.

The intent of the Act is to open this resource to exploration and exploitation by the private sector, throughout the Province. While this resource appears at this time to be more costly than the resources being presently developed, it may prove to be a timely addition to the overall energy resources of the Province. In this regard, a map indicating the faults, tectonic belts and hot springs locations is being prepared for publication. This map should prove to be of use in the preliminary exploration for geothermal resources.

The Oil Shale resources of the Province were reviewed during the year, as a result of interest shown at a symposium on the subject in New Brunswick. The best known British Columbia deposit of this resource is located on the Queen Charlotte Islands, where several Oil Shale Permits are in force; however, very little work has been done on this resource in the Province.

Throughout the year, discussions were held with representatives of various companies, regarding their problems and proposals for exploration in the Province.

Reservoir Geology

Although 1981 drilling activity was moderate when compared to the two previous years, the Reservoir Geology Section carried out a comprehensive program of assessment and mapping in detail of all oil and gas accumulations encountered by the drill. Structural, stratigraphic, and reservoir geologic data made available through drilling were used as a basis for new and revision-type map construction, reservoir studies, evaluation of reserves and the control of remedial work, cycling, repressuring, and secondary recovery projects.

The most active area for development wells was the Eagle field for infill and extension Belloy oil wells. Minor development drilling for oil took place at the Cecil field for North Pine oil and the Birch field for Baldonnel oil. There were also a few fields with only single development wells such as Boundary Lake oil and the Flatrock and Boundary Lake fields. Development or extension drilling for gas was most active in the Halfway formation at the Tommy Lakes-Trutch area; the Jean Marie formation of the general Helmet area; and the Cretaceous sands of the Deep Basin area. However significant development or extension of gas pools in these areas are not evident as yet because many of the wells have not made definitive drillstem or production tests. Minor development drilling for gas also took place at fields such as Monias for Halfway and Dahl for Bluesky gas.

Significant pool map changes or new pools include the Helmet Slave Point pool as the result of seismic data becoming available; the incorporation of the former Fort St. John field Halfway "B" pool into the Wilder Halfway "A" gas pool as a result of geological reinterpretation and pressure data; and the designation of a Baldonnel gas pool in the Grizzly North field as a result of well stimulation and production tests.

Five new fields encompassing single or multiple well pools were designated. These included the Elleh field with Jean Marie and Slave Point pools; July Lake with one Jean Marie pool plus four single well Pine Point pools; Kyklo with a Debolt pool; Murray in the Foothills with two Baldonnel pools; and Osborn with Bluesky, Gething, Baldonnel, and Belloy pools.

Field boundary changes, mostly extensions were implemented at the following fields, Beaton River West, Birch, Blueberry, Boundary Lake North, Buick Creek North, Highway, Martin, Mica, Mike, Milligan Creek, Monias, North Pine, Peejay, Pocketknife, Rigel, Rigel East, Sierra, Stoddart, Stoddart South, Tommy Lakes, Two Rivers and Wilder.

Controversy with industry as regards parameters used for calculating well allowables was minimal, in contrast to earlier years. Four "Common Purchaser" or "drainage" submissions were evaluated, and the subsequent related hearings by the British Columbia Utilities Commission was attended as technical advisory staff. Three of these "drainage" application hearings, namely those by Silverton Resources for the Buick Creek Bluesky "C" pool; Orbit Oil and Gas for the Boundary Lake North Halfway "E" pool; and by Westgrowth Petroleum for the Jedney Baldonnel "A" and Halfway "A" pools were routine. The other application by Regal Resources for the Helmet Slave Point "A" pool became controversial as the result of the introduction of previously confidential seismic data, and was withdrawn.

Lithologic studies were conducted to determine the continuity extent of hydrocarbon reservoirs associated with the Jean Marie carbonate, the Belloy at Stoddart and Stoddart West, and the Cretaceous sands in the Deep Basin. Although insufficient and/or

complexity of data caused difficulty it appears that the Belloy in the Stoddart and Stoddart West area comprise a number of discrete pools; that Cretaceous sand bodies in the Deep Basin are in most cases poorly developed and discontinuous, and the Jean Marie gas saturated but capable of gas production only in local areas of favourable permeability.

In September the agreement signed between the Province of British Columbia and the Federal Government resulted in the designation of areas, outside of which oil wells under certain conditions would receive N.O.R.P. or the New Oil Reference Price. A series of plats outlined these designated areas was completed by year end.

Routine assistance was provided in advising other Branches with geological evaluations and assessments of Crown lands posted for disposal of petroleum and natural gas rights, petroleum and natural gas lease extension renewals; the reclassification of wells for the purposes of information confidentiality and new pool discovery status; geological appraisal concerning industry production schemes such as concurrent production and good engineering practices (GEP's) and the disposal of water production and surplus mud.

TITLES BRANCH

There were seven dispositions of Crown reserve petroleum and natural gas rights held during 1981. These resulted in tender bonus bids amounting to $60,776,403. This represents a decrease of $120,490,401 or 66.5 per cent from the amount received in 1980 and illustrates the downturn in oil and gas exploration in the Province which began the first part of the year.

Geophysical operations also decreased considerably in 1981. Out of 183 programs approved, 32 were cancelled and 11 delayed until 1982. This corresponds to 289 approvals in 1980 with 50 carried over until 1981. There were 280.5 seismic crew weeks worked and 9 875 kilometres of line recorded in 1981. This was a decrease of 186.5 crew weeks and more than 10 000 kilometres of line recordings.

At December 31st there were 12 249 155 hectares of oil and gas rights held under 8,076 titles. This compares with 13 296 560 hectares and 7,463 titles held at the end of 1980. The decrease in the number of hectares was due to fewer exploration permits being requested to offset those reaching the end of their term. At the end of 1981 there were 387 compared with 458 the previous year.

In addition, drilling reservations went from 104 to 58 as this form of title was being phased out as a result of an amendment to the *Petroleum and Natural Gas Act* that became effective August 1, 1981. A new form of title known as "drilling licence" was to be introduced in January, 1982.

The following table summarizes the various forms of title held in the Province.

Form of Title	Number	Hectares
Permits	387	6 855 975
Natural Gas Licences	1	1 619
Drilling Reservations	58	247 816
Leases (All Types)	7 630	5 143 745
Total	8 076	12 249 155

The following transactions were completed during 1981:

1.	Permits—	
	Issued	53*
	Renewed	285†
	Converted to Lease	9
	Cancelled	124
	Transferred (Assigned)	48

* Includes 9 B.C.R.I.C. permits.
† Includes 40 B.C.R.I.C. permits.

		Number Advertised	Number Sold
2.	Drilling Reservations—		
	Issued		7
	Renewed		70
	Converted to Lease		52
	Cancelled		53
	Transferred (Assigned)		6
3.	Leases—		
	Issued		864
	Annual Rental Paid		5 820
	Continued Under Penalty		293
	Continued NOT Under Penalty		773
	Cancelled		128
	Transferred (Assigned)		874
4.	Natural Gas Licences—		
	Issued		5
	Renewed		0
	Converted to Lease		7
	Cancelled		7
	Transferred (Assigned)		0
5.	Crown Sales—		
	Permits	44	40
	Drilling	11	7
	Leases	388	269
	Total	443	316
6.	Geophysical Licences—Issued		30
7.	Affidavits of Work—Approved—		
	Permits		76
	Leases		23
8.	Miscellaneous Recordings (Grouping Notices, Encumbrances, Mergers, etc.) 19		7 500
9.	Unit Agreements—Approved		1

OFFSHORE ADMINISTRATION BRANCH

In March 1981 the British Columbia Government confirmed and clarified its claims and responsibilities in the inland waters of the Pacific Coast. This is expressed in Order in Council 1347, dated 1981 06 04. By this Order in Council British Columbia defines the Inland Marine Zone of the coastal waters which, for the purpose of sea bottom ownership and resource management, the Province considers no different from other bodies of water lying within the Provincial boundaries.

The Inland Marine Zone is the area of water lying east (i.e., landward) from a line from the U.S./Canada boundary in the Strait of Juan de Fuca in the south, running from headland to headland along the west side of Vancouver Island to Cape Scott, thence to Cape St. James on the Queen Charlotte Islands and similarly following along the west side of the Queen Charlottes to the U.S./Canada boundary in Dixon Entrance. This line coincides with the present baseline of the Canadian Territorial Sea—the "Twelve Mile Zone".

Clarification of its responsibilities in the offshore has permitted British Columbia to start forward-looking planning activities toward eventual resumption of exploration on the coast. The Offshore Administration Branch has been instrumental in organizing three interministerial committees consisting of those ministries that would be affected by offshore developments. The Branch has, in conjunction with the Ministry of Environ-

ment, laid the groundwork for public hearings on the offshore, should the conduct of hearings be appropriate for any stage—exploration, development, production—of offshore activities. A major preliminary environmental assessment has been initiated and is now being carried out under the leadership of the Ministry of Environment.

The Branch also serves as a focal point for liaison with the petroleum industry on offshore activities. Several companies have interests in offshore and have started to prepare their own environmental assessments and have started work towards development of exploration plans.

Other planning and preparation activities of the Branch include the organization of a technical conference on the expectations and opportunities from offshore developments. This conference is scheduled to take place in November 1982. A computer model is being prepared as a planning tool to study the manpower, supply, and service requirements under different scenarios of oil and gas finds.

The Offshore Branch has also participated in the preparation of the British Columbia positions for the discussions with the Federal Government on the management and revenue sharing of the offshore resources.

Table P1—Hectares of Crown Petroleum and Natural Gas Rights Held, 1972–1981

	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Petroleum and natural gas permits	8 050 271	7 046 019	6 567 416	5 379 502	5 363 440	5 232 700	5 057 241	4 727 388	8 331 140	6 855 975
Petroleum and natural gas leases	2 627 973	2 507 752	2 592 138	2 255 952	2 387 335	2 911 776	3 131 372	3 755 470	4 248 550	4 833 344
Natural gas licences	.....	8 410	6 299	3 160	2 904	14 721	.....	7 559	25 346	1 619
Natural gas leases	190 314	194 156	194 240	197 388	203 789	209 117	228 480	255 903	259 307	308 853
Petroleum leases	520	520	520	1 287	1 287	1 287	1 548	1 548	1 548	1 548
Drilling reservations	182 956	169 925	146 019	128 570	212 529	338 681	426 117	422 888	430 669	247 816
Totals	11 052 034	9 926 782	9 506 632	7 965 859	8 171 284	8 708 282	8 904 758	9 170 756	83 296 568	12,249,155

Table P2—Petroleum and Natural Gas Revenue, 1947–1981

	1947–72	1973	1974	1975	1976	1977	1978	1979	1980	1981	1947–81
Rentals and Fees	$	$	$	$	$	$	$	$	$	$	$
Permits	49 091 720	1 524 431	2 224 111	2 150 965	2 114 161	2 128 190	1 882 589	1 696 423	3 768 152	1 895 471	68 476 213
Drilling reservations	1 307 427	77 344	85 481	75 635	124 196	172 078	266 654	223 760	251 047	121 233	2 704 855
Natural gas licences	68 254	803	8 057	4 155	3 838	.....	47 502	43 262	29 826	20 669	226 366
Leases (all)	92 819 518	6 500 830	9 678 015	10 242 543	11 925 123	13 680 926	16 782 862	19 428 644	23 665 473	25 296 643	230 020 577
Total rentals	143 286 919	8 103 408	11 995 664	12 473 298	14 167 318	15 981 194	18 979 607	21 392 089	27 714 498	27 334 016	301 428 011
Crown Reserve Disposition Bonuses											
Permits	97 696 071	7 877 134	15 434 510	6 623 647	27 548 820	60 017 393	49 518 449	45 949 254	21 126 236	22 531 164	354 322 678
Drilling reservations	33 944 366	3 108 092	2 669 318	2 708 463	6 152 419	30 633 861	64 467 213	60 987 012	68 358 992	6 338 253	279 367 989
Leases	76 876 875	6 791 215	4 851 506	3 417 137	9 525 202	34 816 472	63 473 986	84 105 339	91 781 576	31 906 986	407 546 294
Crown reserve disposition totals	208 517 312	17 776 441	22 955 334	12 749 247	43 226 441	125 467 726	177 459 648	191 041 605	181 266 804	60 776 403	1 041 236 961
Crown Royalties											
Gas	34 875 517	6 601 250	2 843 329	2 848 930	173 315	180 951	72 729	67 200	110 018	14 084	47 247 323
Oil	72 831 316	14 543 621	48 296 036	44 782 489	43 925 220	41 015 470	42 191 350	44 819 110	47 634 589	53 922 930	453 962 131
Processed products and penalties	1 098 485	42 675	134 180	570 321	711 810	888 799	1 075 378	1 048 746	1 624 942	1 637 117	8 832 452
Gas revenue from B.C. Petroleum Corp.	.....	.....	26 000 000	172 150 000	149 850 000	174 250 000	159 400 000	257 875 000	242 875 000	158 000 000	1 340 400 000
Crown royalty totals	108 805 318	20 647 546	77 273 545	220 351 740	194 660 345	216 335 220	202 739 457	303 810 056	292 244 549	213 574 131	1 850 441 906
Miscellaneous fees	382 839	27 028	19 104	18 451	32 248	64 583	69 392	82 490	95 029	66 027	857 281
Total petroleum and natural gas revenue	460 992 388	46 554 423	112 243 647	245 592 826	252 086 352	357 848 723	399 248 104	516 326 240	501 320 880	301 750 577	3 193 964 159

Table P3—Established Hydrocarbon and By-product Reserves—December 31, 1981

	Crude Oil, 10^3m^3	Raw Gas, 10^6m^3	Marketable Gas, 10^6m^3*	Propane, 10^3m^3†	Butanes, 10^3m^3†	Pentanes, 10^3m^3†	Sulphur 10^3t†
Initial reserves, current estimates	79 968.3	478 689	391 505	3 051.9	4 435.0	8 696.9	13 711.9
Cumulative production to December 31, 1980	52 399.4	174 262	143 863	1 485.8	2 092.1	4 092.2	2 241.3
Remaining reserves estimated at December, 1980	27 643.7	288 334	234 866	1 742 7	2 503.2	4 627.7	10 302.9
Drilling in 1981	+ 143.0	+ 13 842	+ 11 032	+ 51.5	+ 84.6	+ 165.5	+ 957.3
Revisions in 1981	− 217.8	+ 2 251	+ 1 744	− 228.1	− 244.9	− 188.5	+ 210.4
Production in 1981	− 2 060.0	− 8 293	− 6 749	− 54.1	− 77.2	− 150.9	− 180.1
Production adjustment	.....	.....	.....	+ 59.4	+ 49.6	+ 1.6	+ 28.0
Remaining reserves at December 31, 1981	25 508.9	296 134	240 893	1 571.4	2 315.3	4 455.4	11 318.5

NOTES: Gas volumes measured at 101.325 kPa and 15°C.

* Figures in this column are estimates of marketable gas, i.e. the gas available to the transmission line after removal of acid gases and a percentage of liquid hydrocarbons.

† Figures in these columns are estimates based on average gas analyses and estimated plant recoveries. Actual recoveries of propane, butanes, pentanes and sulphur were 64.1, 84.6, 152.8 10^3m^3 and 209.3 10^3t respectively during 1981.

Table P4—Drilling and Production Schemes Approved in 1981

Field/Area	Pool	Area or Well	Date of Approval
Approval of Concurrent Production			
Mallard area	Belloy	Twp. 85, Rge. 19, Section 17	1981 06 22
Approval of Concurrent Production and Good Engineering Practice			
Stoddart West	North Pine 'A'	Twp. 85, Rge. 20, SE. ¼ of Section 25	1981 04 21
Approval of Good Engineering Practice			
Cabin	Slave Point 'A'	NTS 94-P-5, Block B, Units 34, 35, 44 and 45	1981 01 14
Approval of Salt-water Disposal			
Aspen area	Halfway	Czar Aspen a-81-F/94-A-13	1981 04 21
Commotion area	Commotion	Getty CS Commotion c-29-C/93-P-12	1981 12 29
Junior	Pine Point	Esso Junior a-41-C/94-I-11	1981 01 13
Siphon	Halfway	Kissinger Vaughey Siphon 7-3-87-16	1981 02 13
Wilder	Halfway	Amerada Pac Wilder 11-17-83-19	1981 07 20

Table P5—Wells Drilled and Drilling, 1981

Well Authorization Number	Well Name	Date Spudded	Date Rig Released	1981 Depth	Status at 1981 12 31
5596	Aberford Card N Boundary 6-35-87-14	81 01 28	81 02 15	1 426.0	Dunlevy gas
5591	Aberford et al Peggo d-67-D	81 02 23	81 03 04	1 362.0	Jean Marie gas
5245	Amoco et al Hay d-31-F	82 02 21	81 02 07	1 634.0	Slave Point gas
5694	Amoco Wainoco E Monias 9-17-82-20	81 11 02	.....	.....	Drilling
5463	Aquit et al Sloane 11-17-78-18	80 11 05	81 02 03	3 300.0	Halfway gas
5708	Aquit Sundown a-23-I	81 12 26	.....	.....	Drilling
5590	BP W Beatton d-10-C	81 02 19	81 03 07	1 192.0	Abandoned-dry
4974	BP et al Bullmoose c-14-E	80 07 09	81 01 12	3 430.0	Abandoned-dry
5501	BP Oil W Bullmoose d-33-H	81 04 10	.....	.....	Drilling
5521	BP et al Donnie d-75-C	81 01 05	81 02 02	1 490.0	Halfway gas
5258	BP et al Highhat d-78-K	80 06 09	81 08 03	3 773.0	Baldonnel gas
5542	BP Ethyl Kathy d-30-G	81 01 31	81 03 15	2 169.0	Abandoned-dry
5664	BP Murdale 10-19-87-19	81 07 29	81 08 22	1 575.0	North Pine oil
5099	BP et al Murray d-83-J	80 08 03	81 05 10	3 386.0	Baldonnel gas
5538	BP Petitot a-1-D	81 01 25	81 02 13	1 504.0	Abandoned-dry
5452	BP N Sukunka c-36-F	80 11 04	81 10 20	4 297.0	Abandoned-dry
5329	Bearcat Trapper et al Impa a-65-H	80 10 17	81 02 10	2 049.0	Abandoned-dry
5265	Bluesky et al Antler c-14-K	81 01 06	81 01 27	1 155.0	Halfway gas
5616	Bluesky et al Bonnie b-2-E	81 02 07	81 03 28	1 850.0	Halfway gas
5582	Bluesky et al Trutch a-23-J	81 02 12	81 02 19	357.0	Abandoned-junked
5632	Bluesky et al Trutch a-A23-J	81 02 20	81 03 17	1 247.0	Halfway gas
5515	Bluesky et al Trutch a-23-K	81 01 10	81 02 08	1 270.0	Halfway gas
5578	Bluesky et al Trutch b-50-K	81 03 20	81 04 06	1 096.0	Halfway gas
5550	Bluesky et al Trutch b-64-L	81 01 13	81 01 31	1 015.0	Halfway gas
5624	Bluesky et al Trutch c-78-G	81 02 19	81 03 18	1 318.0	Halfway gas
5486	Bow Rio et al Elm d-A55-C	81 01 20	81 02 15	1 133.8	Bluesky gas
5182	Bow Rio et al Pickell a-63-I	80 12 29	81 01 15	1 156.0	Abandoned-dry
5477	Bow Rio et al Prespatou a-25-A	81 01 06	81 01 25	1 160.0	Abandoned-dry
5490	Brinco et al Cabin c-44-B	81 02 04	81 03 07	2 071.0	Slave Point gas
5510	Brinco et al Ekwan b-10-K	81 01 13	81 02 25	1 900.0	Abandoned-dry
5484	Brinco et al Ring d-71-G	81 01 18	81 01 24	888.6	Abandoned-dry
5652	Brinco et al Tenaka d-97-K	81 07 10	81 09 01	2 350.0	Tetcho gas
5509	CCS CEGO Wargen b-100-J	81 03 05	81 03 17	1 237.5	Bluesky gas
5294	CCS et al Ladyfern d-49-J	81 01 14	81 03 15	2 980.0	Standing
5609	CCS et al Mike d-75-H	81 02 18	81 03 02	1 240.0	Abandoned-dry
5677	CDCOG et al N Pine 16-14-85-18	81 10 01	81 10 15	1 350.0	Abandoned-dry
5151	CDCOG S Kotcho c-86-A	80 02 12	81 02 07	2 000.0	Abandoned-dry
5557	CEGO et al Coplin 3-15-85-23	81 01 10	81 02 14	2 123.0	Abandoned
5551	CNWL et al Drake d-57-F	81 02 14	81 02 26	1 104.0	Charlie Lake gas
5471	CZAR et al Altares b-28-D	80 11 18	81 01 08	2 303.0	Abandoned-dry
5568	CZAR et al Dodger d-59-E	81 02 16	81 03 01	1 395.0	Jean Marie gas
5482	CZAR et al Gates 6-3-82-24	80 12 10	81 02 24	2 510.0	Abandoned-dry
5292	CZAR et al Helmet a-69-B	81 03 06	81 03 14	1 411.0	Jean Marie gas
5516	CZAR et al Helmet b-26-C	80 12 22	81 01 03	1 250.0	Abandoned-dry
5608	CZAR et al Helmet b-88-C	81 02 24	81 03 06	1 242.0	Jean Marie gas
5528	CZAR et al Helmet c-18-D	81 01 04	81 01 17	1 325.0	Jean Marie gas
5607	CZAR et al Helmet a-41-E	81 03 02	81 03 10	1 226.0	Jean Marie gas
5526	CZAR et al Helmet b-88-E	81 01 03	81 01 13	1 256.0	Jean Marie gas

5470	CZAR et al Helmet d-17-K	80 12 15	81 01 02	1 347.0	Jean Marie gas
5580	CZAR et al Kli b-62-D	81 01 27	81 02 12	1 383.0	Jean Marie gas
5507	CZAR et al Medana c-18-D	81 01 14	81 02 18	1 951.0	Halfway gas
5498	CZAR et al Medana a-49-L	81 01 05	81 02 28	2 001.0	Standing
5563	CZAR et al Midwinter b-48-I	81 02 04	81 02 14	1 290.0	Halfway gas
5653	CZAR et al Monias 7-21-82-21	81 05 28	81 08 17	2 984.4	Halfway gas & Belloy gas
4878	CZAR et al Monias 7-27-82-21	80 11 11	81 02 17	3 023.0	Halfway gas
5489	CZAR et al Osprey c-58-J	80 12 31	81 01 10	1 215.0	Gething gas
5564	CZAR et al Pesh a-43-C	81 02 12	81 02 21	1 078.0	Jean Marie gas
5562	CZAR et al Pesh b-81-K	81 01 14	81 02 10	1 696.0	Jean Marie gas
5552	CZAR et al Suhm a-65-D	81 01 06	81 02 02	1 315.0	Jean Marie gas
5531	CZAR et al Thetlaandoa b-A24-B	81 01 18	81 02 05	1 360.0	Debolt gas
5600	CZAR et al Tommy Lakes b-4-D	81 02 09	81 03 03	1 505.0	Halfway gas
5622	CZAR et al Tommy Lakes b-10-D	81 03 07	81 03 15	670.6	Standing
5581	CZAR et al Wildboy b-42-B	81 02 14	81 02 22	1 360.0	Jean Marie gas
5569	CZAR et al Wildboy d-24-I	81 01 15	81 01 25	1 305.0	Jean Marie gas
5456	Canhunter et al Blackhawk a-43-D	80 11 05	81 01 16	3 500.0	Dunlevy gas
5702	Canhunter et al Chilcotin b-22-K	81 12 09	.....	.....	Drilling
5534	Canhunter Esso Cutbank d-53-G	81 01 24	81 02 22	2 505.0	Dunlevy gas
5473	Canhunter Esso Hourglass d-62-J	81 01 09	81 03 07	2 914.0	Cadotte gas
5089	Canhunter Esso N Julienne b-5-I	81 09 11	81 12 14	2 705.0	Gething gas
5439	Canhunter et al Nazko d-96-E	80 11 10	81 03 16	3 324.0	Standing
5544	Canhunter Esso Nazko b-16-J	81 04 02	81 05 31	2 700.0	Abandoned-dry
5494	Canhunter Esso Noel d-15-H	81 01 04	81 03 09	2 900.0	Fahler gas
5680	Canhunter et al Redstone b-82-E	81 10 03	81 11 04	1 720.0	Abandoned-dry
5478	Canhunter Esso Steep ock b-28-L	81 03 17	81 06 12	3 020.0	Dunlevy gas & Fahler gas
5465	Canhunter et al Wasp b-4-L	80 12 02	81 03 11	3 700.0	Dunlevy gas
5523	Cdn Oxy et al Datcin d-26-K	81 01 06	81 02 14	2 041.0	Abandoned-dry
5240	Cdn-Sup Cameron d-13-H	81 01 07	81 03 28	1 918.0	Doig gas
5454	Cdn-Sup Septimus 14-4-81-19	80 10 20	80 11 01	1 397.0	Abandoned-dry
5517	Coseka et al Eagle 6-19-84-18	81 01 15	81 02 12	1 905.0	Belloy oil
5640	Coseka et al Eagle 8-19-84-18	81 03 10	81 03 30	1 880.0	Belloy oil
5710	Coseka et al Ekwan c-35-H	81 12 25	.....	.....	Drilling
5621	Coseka et al Falcon d-17-C	81 03 03	81 03 14	1 190.0	Abandoned-dry
5572	Coseka et al Montney 6-19-87-18	81 02 11	81 03 08	1 465.0	Abandoned-dry
5575	Coseka et al Oak 8-13-86-18	81 03 12	81 04 03	1 495.0	Cecil oil
5689	Coseka et al Pinto d-97-F	81 11 09	81 11 21	1 476.0	Dunlevy gas
5691	Coseka et al Progress 13-11-77-16	81 10 29	.....	.....	Drilling
5726	Coseka et al Squirrel 6-25-87-19	81 12 22	.....	.....	Drilling
5699	Coseka et al Thunder d-31-H	81 12 23	.....	.....	Drilling
5641	Dome Birch d-10-I	81 06 06	81 06 23	1 310.0	Baldonnel oil
5480	Dome Col Drake a-87-E	81 09 24	81 10 03	1 085.0	Abandoned-dry
5627	Dome Col N Drake a-9-L	81 03 04	81 03 14	1 140.0	Abandoned-dry
5500	Dome et al E Clarke a-5-A	81 01 05	81 02 28	2 176.0	Abandoned-dry
5518	Dome et al Elm d-47-C	81 02 17	81 03 01	1 200.0	Abandoned-dry
5613	Dome et al Klua d-55-F	81 02 17	81 03 15	2 050.0	Slave Point gas
5457	Dome et al Pink a-93-D	80 11 10	81 04 11	2 700.0	Abandoned-dry
5628	Dome et al Prophet d-19-E	81 03 06	81 04 15	1 800.0	Debolt gas
5612	Dome et al Skwat b-59-B	81 03 18	81 03 29	1 123.0	Gething gas
5481	Dome Fina Bunch a-49-I	81 01 01	81 02 12	1 585.0	Abandoned
5692	Dome Numac Birch d-1-J	81 10 29	81 11 14	1 340.0	Baldonnel oil
4737	Dome Peggo a-11-H (re-entry)	79 02 26	81 02 28	2 120.0	Abandoned-dry
5522	Dome Pennzoil Jackfish d-39-K	81 01 08	81 03 03	2 215.0	Abandoned-dry

Table P5—Wells Drilled and Drilling, 1981—Continued

Well Authorization Number	Well Name	Date Spudded	Date Rig Released	1981 Depth	Status at 1981 12 31
5678	Dome W Nig d-11-D	81 10 21	81 11 10	1 488.0	Dunlevy gas
5681	Dome-CDA Alces 6-22-83-15	81 09 28	81 11 08	2 437.0	Abandoned-dry
5660	Dome-CDA Alces 7-30-83-14	81 07 07	81 08 12	2 268.5	Kiskatinaw gas
5665	Dome-CDA Buick d-52-J	81 08 07	81 08 27	1 550.0	Abandoned-dry
5688	Dome-CDA et al Alces 10-25-83-15	81 10 14	81 11 17	2 322.0	Kiskatinaw gas
5673	Dome-CDA et al Parkland 12-25-81-17	81 09 20	81 12 17	3 784.4	Abandoned-dry
5658	Dome-CDA Gulf Nig b-68-G	81 07 06	81 08 04	1 531.4	Abandoned-dry
5723	Dome-CDA W Nig d-1-D	81 12 21	.....	.....	Drilling
5679	Dome-CDA Teko 6-2-83-18	81 09 19	81 10 25	2 166.0	Abandoned-dry
5676	Dome-CDA Woodrush c-38-E	81 09 13	81 09 22	1 105.0	Abandoned-dry
5650	Esso et al Boundary 14-28-84-14	81 06 05	81 06 27	1 187.0	Abandoned-junked
5663	Esso et al Boundary A14-28-84-14	81 07 06	81 08 03	1 405.8	Boundary oil
5584	Esso Inga 6-33-86-23	81 02 18	81 03 29	1 785.0	Inga oil
5425	Esso Kelly a-23-I	80 11 13	81 01 25	2 760.0	Paddy gas
5670	Esso W Beatton d-65-L	81 09 24	81 10 15	1 263.0	Abandoned-dry
5214	Fina BCRIC HB Segar c-13-I	80 02 02	81 03 21	2 456.0	Sulphur Point gas
5587	Fina et al Kahntah d-15-A	81 01 30	81 03 14	2 554.5	Abandoned-dry
5579	Francana Canso Paddy d-97-E	81 02 11	81 02 25	951.0	Abandoned-dry
5277	Getty Border c-19-G	81 01 15	81 01 21	953.0	Gething gas
5006	Getty Commotion c-63-C	80 05 13	81 03 06	4 386.0	Baldonnel gas
5559	Getty Gulf Border a-25-G	81 01 25	81 02 07	995.0	Gething gas
5623	Getty Pine 6-8-77-25	81 04 19	81 09 17	3 610.0	Baldonnel gas
5654	Global et al Clayhurst 12-21-82-14	81 06 07	81 08 18	3 551.0	Abandoned-dry
5513	Gulf Dome Crest d-87-C	81 01 19	81 03 09	2 530.0	Abandoned-dry
5434	Gulf et al Thunder d-39-I	80 12 12	81 10 03	4 451.0	Halfway gas
5397	Gulf Helmet b-6-B	81 01 08	81 02 11	2 325.0	Abandoned-dry
5512	Gulf Philis a-88-B	81 01 22	81 03 12	2 899.0	Abandoned-dry
5548	HB et al Bedji d-85-L	81 01 13	81 02 24	2 344.0	Abandoned-dry
5543	HB et al Collie d-20-I	81 01 08	81 02 25	1 978.0	Abandoned-dry
5546	HB et al Diane d-58-H	81 01 25	81 03 19	2 950.0	Abandoned-dry
5619	HB et al July b-59-L	81 03 01	81 03 30	2 055.0	Pine Point gas
5112	HB et al Oetco a-79-H	80 02 28	81 01 09	4 653.0	Baldonnel gas
5371	HB et al Pocketknife a-59-I	80 07 24	81 02 11	3 841.0	Shunda gas
5586	HB et al Snowberry d-13-D	81 01 24	81 02 13	1 150.0	Abandoned-dry
5503	IER Camel et al Yoyo a-61-J	80 12 30	81 02 13	2 442.0	Abandoned-dry
5728	KANENERGY et al Inga 15-32-85-23	81 12 29	.....	.....	Drilling
5690	KANENERGY et al W Inga 6-14-86-24	81 11 04	81 12 06	1 882.5	Halfway gas
5597	Kilo et al Stoddart 6-13-85-19	81 03 02	81 04 03	1 845.0	Belloy oil and Cecil gas
5649	Ladd Attachie 6-10-84-22	81 05 05	81 06 29	2 271.6	Abandoned-dry
5659	Ladd Attachie A7-26-84-22	81 07 03	81 09 04	2 358.0	Debolt gas
5539	Ladd et al Caribou a-67-F	81 01 10	81 04 28	2 300.0	Baldonnel gas
5674	Ladd et al Gates 10-19-81-23	81 09 11	81 12 01	2 560.0	Halfway gas
5701	Ladd et al Gates b-66-B	81 12 06	.....	.....	Drilling
5068	Landbank et al Boundary 16-8-84-13	80 12 31	81 01 20	1 530.0	Abandoned-dry
5706	Murphy et al Inga 16-5-85-23	81 12 18	.....	.....	Drilling
5638	NGT Kersley d-2-E	81 03 08	81 04 10	1 329.2	Abandoned-dry
5479	Natomas et al Nig d-99-C	81 01 01	81 01 23	1 474.0	Abandoned-dry
5611	Norcen CCS Osborn d-31-K	81 03 05	81 03 17	1 256.0	Halfway gas

5643	Norcen Eagle 16-33-84-18	81 06 04	81 06 21	1 843.0	Belloy oil
5644	Norcen Eagle 8-33-84-18	81 03 13	81 04 05	1 825.0	Belloy gas
4786	Norcen W Farrell c-14-J	79 02 10	81 03 27	2 015.8	Gething gas
5625	Nu Canadian BCRIC Wendy c-73-G	81 03 15	81 03 25	1 250.0	Halfway gas
5153	Numac et al Slave d-99-H	80 03 12	81 03 12	1 566.0	Abandoned-dry
5573	OIL et al Big Arrow b-77-F	81 02 14	81 02 25	1 250.0	Abandoned-dry
5570	OIL et al Lapp c-96-C	81 03 01	81 03 09	1 065.0	Abandoned-dry
5571	OIL et al W Dahl a-14-K	81 02 28	81 03 10	1 235.0	Abandoned-dry
5618	PEX et al W Laprise a-45-J	81 02 18	81 03 16	1 460.0	Baldonnel gas
5711	PEX Union Kelly d-35-H	81 12 21	.....	.....	Drilling
5377	PEX HB Boucher 10-27-82-23	80 11 01	81 02 12	2 182.0	Abandoned
5661	PEX Stoddart 6-9-86-20	81 09 18	81 10 15	1 943.3	Belloy oil
5407	PEX WP Ft St John SE 12-10-83-17	80 08 14	81 01 16	4 175.0	Abandoned-dry
5671	Pancon et al Eagle 6-29-84-18	81 09 06	81 09 29	1 915.0	Belloy oil
5598	Pembina et al Dahl b-44-B	81 02 20	81 03 04	1 020.0	Bluesky gas
5532	Petrorep et al Mike d-56-H	81 01 30	81 02 09	1 141.0	Abandoned-dry
5712	Pico et al Boundary 8-17-84-13	81 12 13	81 12 25	1 501.0	Boundary oil
5492	Precambrian et al Trutch c-94-I	81 03 02	81 03 25	1 105.4	Halfway gas
5499	Precambrian et al Trutch d-37-I	81 02 01	81 02 16	1 265.0	Abandoned-dry
5672	Quasar et al Carbon d-48-I	81 12 02	.....	.....	Drilling
5497	Quasar et al Gaylard c-14-D	81 02 07	81 08 31	2 291.0	Doig gas
5506	Quintana et al Neptune b-32-K	80 12 30	81 01 29	2 320.0	Abandoned-dry
5535	Ranger et al Hostli c-93-G	81 01 08	81 02 06	1 605.0	Slave Pt. gas & Jean Marie gas
5200	Ranger et al Hostli d-99-H	81 02 11	81 02 12	1 619.0	Slave Pt. gas
5547	Ranger et al Shekilie d-97-H	81 02 18	81 03 09	1 620.0	Jean Marie gas
5595	Regal et al Holman b-8-D	81 03 12	81 03 30	1 411.0	Halfway gas
5651	Regal et al North Pine A6-27-85-18	81 06 02	81 06 19	1 797.0	Belloy gas
5381	Rem et al Septimus 7-5-82-19	80 11 21	81 02 13	2 826.0	Halfway gas
5565	Rem Pem Pickell d-15-B	81 02 13	81 02 27	1 185.0	Abandoned-dry
5646	Rem Roxy Clayhurst 7-17-82-14	81 06 05	81 07 22	2 362.5	Abandoned-dry
5700	Remington S Grassy d-54-A	81 12 06	.....	.....	Drilling
5495	Remington W Grassy b-7-H	80 12 30	81 03 12	2 046.0	Debolt gas
5541	Riva et al LaGarde 11-15-87-15	81 01 03	81 01 21	1 385.6	Abandoned
5583	Riva et al Siphon 7-14-87-16	81 01 27	81 02 14	1 380.0	Dunlevy oil
5530	Ruperts et al Willow b-88-A	81 01 28	81 02 09	1 130.0	Halfway gas
5576	Samedan et al Umbach d-77-F	81 01 28	81 02 19	1 295.2	Abandoned-dry
5527	Sceptre et al Elleh a-18-E	81 01 04	81 02 07	2 101.0	Slave Point gas
5592	Sceptre et al Elleh d-43-E	81 02 14	81 03 22	2 083.0	Jean Marie gas
5662	Scurry CEGO Eagle 13-26-84-18	81 07 07	81 07 27	1 860.5	Belloy oil
5657	Scurry CEGO Eagle 5-26-84-18	81 06 04	81 06 27	1 862.0	Belloy oil
5637	Scurry Eagle 10-31-84-18	81 03 06	81 03 25	1 870.0	Belloy oil
5645	Scurry Eagle 12-32-84-18	81 05 06	81 05 22	1 929.0	Belloy oil
5636	Scurry Eagle 2-6-85-18	81 03 27	81 04 10	1 876.5	Belloy oil
5635	Scurry Eagle 4-5-85-18	81 03 21	81 04 05	1 951.0	Belloy oil
5683	Scurry Monsanto N Pine 14-12-85-18	81 10 08	81 10 30	1 374.0	Abandoned-dry
5668	Scurry PPC Cecil 9-12-84-18	81 09 17	81 10 31	1 455.0	North Pine oil
5666	Scurry PPC Cecil 16-14-84-18	81 08 08	81 09 02	1 899.0	North Pine oil
5669	Scurry PPC Cecil 8-12-84-18	81 09 04	81 09 15	1 402.9	North Pine oil
5667	Scurry PPC Cecil A6-14-84-18	81 11 03	81 11 16	1 133.0	North Pine oil & Dunlevy gas
5472	Shell Bluesky Trutch c-72-K	81 01 08	81 03 02	1 900.0	Abandoned-dry
5108	Shell Bonnie d-95-C	80 01 23	81 01 04	1 562.0	Halfway gas
5554	Shell Cee Cee c-62-H	81 01 16	81 03 05	3 100.0	Abandoned-dry

Table P5—Wells Drilled and Drilling, 1981—Continued

Well Authorization Number	Well Name	Date Spudded	Date Rig Released	1981 Depth	Status at 1981 12 31
5698	Shell Groundbirch 7-29-78-20	81 11 25	.....	.....	Drilling
4727	Shell Gunnel b-8-D	79 02 27	81 01 21	2 200.0	Abandoned
5084	Shell HBOG BCRIC Schooler a-78-B	80 02 22	81 07 17	5 776.0	Abandoned-dry
5684	Shell Kilkerran 12-1-78-14	81 10 17	81 11 20	2 189.1	Abandoned-dry
4935	Shell MacDonald d-30-H	80 09 07	81 01 17	3 809.6	Abandoned-dry
4961	Shell Middlepass b-94-L	80 07 15	81 07 30	5 419.0	Abandoned-dry
5594	Shell Trutch b-48-L	81 02 24	81 03 19	1 225.0	Halfway gas
5511	Silverton et al Mike d-51-H	81 01 02	81 01 16	1 225.0	Abandoned-dry
4635	Star et al Black c-40-K	81 02 12	81 02 26	1 280.0	Abandoned-dry
5697	Suncor Bougie a-85-A	81 12 20	.....	.....	Drilling
5462	Suncor Bougie b-64-E	80 12 04	81 03 27	3 285.0	Halfway gas
5687	Suncor et al Blueberry 11-20-88-24	81 10 21	81 11 06	1 342.0	Dunlevy gas
5685	Suncor et al W Blueberry 10-8-88-15	81 11 09	81 11 25	1 150.0	Dunlevy gas
5589	TP et al Tsea c-40-C	81 02 05	81 03 22	2 315.0	Abandoned-dry
5359	Texaco Gulf Commotion a-89-B	80 10 13	81 05 24	4 250.0	Abandoned-dry
5293	Texaco Gulf Conroy c-18-A	81 02 22	81 03 13	1 312.0	Abandoned-dry
5487	Texaco PCP Farrell 10-22-84-25	80 11 24	81 02 06	2 700.0	Debolt gas
5533	Total et al Squirrel 14-27-87-19	81 01 15	81 02 10	1 525.0	North Pine oil
5603	Turbo et al Flatrock 15-30-84-16	81 02 18	81 03 08	1 550.0	Boundary L oil
5675	Union Aitken d-21-L	81 09 10	81 10 03	1 472.0	Abandoned-dry
5338	Union et al Cautley a-97-H	80 12 29	81 02 21	3 006.7	Slave Pt. gas & Belloy gas
5496	Union HBOG W Beatton d-25-L	80 12 15	81 01 09	1 230.0	Abandoned-dry
5647	Wainoco et al Eagle 14-24-84-19	81 03 17	81 04 17	1 894.0	Belloy oil
5493	Wainoco et al S Ft Nelson c-16-G	81 03 09	81 03 15	710.0	Abandoned-dry
5615	Westcoast et al Windy 12-29-80-22	81 02 20	81 05 22	2 840.0	Halfway gas
5724	Westgrowth et al Helmet d-62-C	81 12 30	.....	.....	Drilling
5704	Westmin et al Farrell 6-10-85-25	81 12 19	.....	.....	Drilling
5524	West Mines et al Mike d-44-H	81 01 18	81 01 27	1 118.7	Gething gas
5525	Wincan et al Dahl d-17-A	80 12 31	81 01 11	1 008.0	Bluesky gas
5610	Zephyr et al Pickell d-55-B	81 03 01	81 03 14	1 250.0	Abandoned-dry

Table P6—Summary of Drilling and Production Statistics, 1981

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Well authorizations issued	60	22	9	4	5	4	10	6	10	9	16	19	174
Well authorizations cancelled	2	5	1	36	9	2	0	0	2	20	0	0	77
Wells spudded	60	43	27	3	3	7	7	2	13	8	6	16	195
Rigs operated (during month)	82	82	62	24	16	17	17	15	16	21	16	23	85[1]
Rigs operating (at month end)	69	63	23	14	11	12	13	7	13	12	8	19	.....
Metres drilled—													
Development	10 249.3	19 419.0	28 070.4	12 595.5	1 929.0	6 812.0	1 860.5	4 534.4	7 556.9	10 573.3	5 150.0	.....	108 750.3
Exploratory outpost	24 316.0	39 510.0	28 444.1	2 300.0	3 386.0	6 478.6	2 362.6	13 161.4	3 463.0	5 986.0	6 059.0	8 648.4	144 115.1
Exploratory wildcat	21 677.2	33 933.7	55 170.3	5 220.8	9 790.0	.....	11 195.0	3 234.5	3 610.0	4 297.0	5 385.0	3 784.4	157 297.9
Totals	56 242.5	92 862.7	111 684.8	20 116.3	15 105.0	13 290.6	15 418.1	20 930.3	14 629.9	20 856.3	16 594.0	12 432.8	410 163.3
Oil wells	1	2	3	6	1	3	1	2	3	2	2	1	27
Gas wells	15	28	32	4	2	3	.....	5	3	1	5	3	101
Abandoned wells	14	24	23	2	2	2	3	3	1	7	3	1	85
Service wells	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Standing wells	.....	1	3	.....	.....	.....	.....	.....	.....	.....	.....	.....	4
Totals	30	55	61	12	5	8	4	10	7	10	10	5	217
Producible oil wells	904	903	902	603	909	908	911	913	915	918	923	925	.....
Producing oil wells	601	603	614	907	580	608	615	615	608	622	618	591	.....
Production in m^3	178 266.9	160 902.8	184 192.9	170 047.2	167 752.9	155 254.3	173 550.9	179 743.7	156 392.1	146 785.4	175 375.5	182 328.9	2 035 952.5[3]
Average daily production	5 750.5	5 746.5	5 941.7	5 668.2	5 411.4	5 175.1	5 598.4	5 798.2	5 213.1	4 735.0	5 845.9	5 881.6	5 577.9
Producible gas wells	1 824	1 847	1 876	1 880	1 879	1 878	1 885	1 881	1 883	1 884	1 888	1 893	.....
Producing gas wells	651	642	560	530	487	435	435	455	511	543	463	562	.....
Production in 10^3 m^3 [2]	1 003 719.3	959 538.1	704 208.3	565 584.3	593 072.2	456 121.8	326 664.5	352 013.0	564 136.5	717 224.4	782 206.4	940 445.8	7 992 233.2[2 3]
Average daily production	32 378.0	34 269.2	22 716.4	18 852.8	19 131.4	15 204.1	10 537.6	11 355.3	18 804.6	23 136.3	26 073.6	30 336.9	21 896.5

Summary for 1981

Drilled	
Locations drilled	211
Multizone wells	5
Re-entries	1
Total	217

Completions	
Oil wells*	27
Gas wells*	101
Service wells	.....
Standing wells	4
Abandoned	85
Total	217

[1] Rigs operated during 1981.
[2] Non-associated gas production only.
[3] Year-end amendments not included.
* Each zone of a multizone well is counted as one well.

Table P7—Monthly Crude Oil and Condensate Production by Fields and Pools

(Volumes in m^3 at 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Aitken Creek—													
Gething A	1 622.4	1 271.3	1 410.5	1 232.7	776.5	1 638.5	1 461.5	1 548.9	1 260.4	827.4	1 582.3	1 515.7	16 148.1
Gething A[1]	58.4	58.2	63.1	51.9	34.7	58.4	57.0	57.4	94.1	247.0	81.0	77.6	938.8
Totals	1 680.8	1 329.5	1 473.6	1 284.6	811.2	1 696.9	1 518.5	1 606.3	1 354.5	1 074.4	1 663.3	1 593.3	17 086.9
Bear Flat—North Pine A	230.6	181.8	218.6	202.5	213.4	201.8	197.7	151.9	176.2	178.9	200.9	213.9	2 368.2
Beatton River—													
Halfway A	2 851.6	2 930.4	2 952.8	2 791.9	2 992.3	2 854.1	2 344.4	2 586.1	1 859.6	2 665.6	2 460.5	3 121.1	32 410.4
Halfway C	147.5	163.4	216.5	197.0	163.9	175.8	133.7	180.3	.....	151.0	136.7	195.4	1 861.2
Halfway D	351.5	599.2	583.4	510.7	506.6	487.1	527.8	524.6	161.3	564.0	624.1	735.4	6 175.7
Totals	3 350.6	3 693.0	3 752.7	3 499.6	3 662.8	3 517.0	3 005.9	3 291.0	2 020.9	3 380.6	3 221.3	4 051.9	40 447.3
Beatton River West—Bluesky A	2 379.0	1 871.3	2 131.6	2 253.8	2 260.1	1 951.2	2 751.8	3 096.0	2 588.2	2 618.3	3 260.8	3 367.0	30 529.1
Beaverdam—Upper Halfway B[1]	31.3	22.5	19.4	17.7	18.6	22.5	20.5	19.8	16.4	.....	.....	18.3	207.0
Beavertail—Halfway B	186.9	113.1	191.5	100.9	142.0	149.6	180.2	132.8	158.7	128.5	180.7	130.9	1 795.8
Birch—													
Baldonnel B[1]	118.2	96.8	40.4	.....	5.4	48.7	59.7	.....	108.5	30.4	69.3	39.0	616.4
Baldonnel C	373.1	414.6	597.6	325.5	.....	338.5	437.9	985.3	659.5	663.0	781.2	895.5	6 471.7
Totals	491.3	511.4	638.0	325.5	5.4	387.2	497.6	985.3	768.0	693.4	850.5	934.5	7 088.1
Blueberry—													
Debolt A	697.4	1 085.5	2 745.5	1 952.2	2 347.6	2 747.6	2 229.3	1 960.2	3 530.7	3 383.8	2 927.7	1 916.9	27 524.4
Debolt B	976.9	840.1	952.0	1 113.6	1 518.1	1 646.5	1 656.8	1 649.3	1 486.5	1 456.1	1 166.2	1 483.1	15 945.2
Totals	1 674.3	1 925.6	3 697.5	3 065.8	3 865.7	4 394.1	3 886.1	3 609.5	5 017.2	4 839.9	4 093.9	3 400.0	43 469.6
Boundary Lake—													
Baldonnel B[1]	2.9	7.0	17.3	10.9	.....	.....	.....	.....	2.6	12.2	5.4	11.3	69.6
Cecil A	32.9	27.0	34.4	39.8	49.6	29.0	33.6	52.5	41.0	25.8	40.8	49.4	455.8
Cecil B	.....	.....	.....	.....	.....	10.7	28.8	22.8	18.2	.....	.....	.....	80.5
Boundary Lake	.....	18.4	8.4	2.5	.....	.....	.....	.....	.....	.....	.....	.....	29.3
Boundary Lake A	67 283.6	59 532.2	66 808.8	62 226.9	62 676.2	52 932.1	64 597.2	64 484.1	58 880.6	51 743.4	62 390.4	62 763.9	736 319.4
Halfway A	727.4	558.6	727.7	497.9	505.4	442.3	467.3	353.7	603.4	519.2	639.9	619.8	6 662.6
Totals	68 046.8	60 143.2	67 596.6	62 778.0	63 231.2	53 414.1	65 126.9	64 913.1	59 545.8	52 300.6	63 076.5	63 444.4	743 617.2
Boundary Lake North—													
Halfway B[1]	121.0	153.6	20.0	.....	143.3	79.6	55.7	.....	.....	33.5	.....	12.6	619.3
Halfway C[1]	203.9	200.4	234.5	240.2	237.6	195.5	173.7	211.5	196.9	235.7	198.0	209.4	2 537.3
Halfway D	175.8	189.0	219.5	136.3	163.2	161.7	190.6	183.1	175.7	148.3	208.5	171.3	2 123.0
Totals	500.7	543.0	474.0	376.5	544.1	436.8	420.0	394.6	372.6	417.5	406.5	393.3	5 279.6
Buick Creek—													
Dunlevy A[1]	152.3	86.1	70.5	46.3	.....	.....	4.5	52.9	30.0	41.1	81.4	37.1	602.2
Dunlevy C[1]	7.6	15.5	7.0	8.1	18.6	12.8	3.7	3.7	3.5	.....	.....	3.7	84.2
Doig A	.....	165.3	1 078.8	1 116.3	1 409.1	922.4	1 235.9	1 440.9	1 007.2	1 142.6	1 062.3	1 091.0	11 671.8
Totals	159.9	266.9	1 156.3	1 170.7	1 427.7	935.2	1 244.1	1 497.5	1 040.7	1 183.7	1 143.7	1 131.8	12 358.2

Buick Creek West—													
Dunlevy B[1]	26.1	2.1	.....	9.3	4.0	22.2	28.1	.....	1.3	17.8	29.4	6.0	146.3
Dunlevy D	199.7	112.1	140.8	.....	4.8	135.0	191.9	139.7	193.6	128.0	128.2	174.6	1 548.4
Totals	225.8	114.2	140.8	9.3	8.8	157.2	220.0	139.7	194.9	145.8	157.6	180.6	1 694.7
Bulrush—													
Halfway A	337.1	253.2	313.5	280.6	310.5	303.6	287.7	263.1	211.5	296.2	188.5	217.0	3 262.5
Halfway B	59.7	42.8	44.5	62.9	53.9	61.1	19.6	79.0	53.2	73.4	25.8	49.6	625.5
Totals	396.8	296.0	358.0	343.5	364.4	364.7	307.3	342.1	264.7	369.6	214.3	266.6	3 888.0
Cache Creek—													
Coplin A[1]	0.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.6
Halfway A[1]	1.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.5
Totals	2.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.1
Cecil Lake—													
Siphon A	62.6	55.7	59.7	60.1	60.6	57.1	58.1	55.2	53.8	57.2	56.9	57.4	694.4
Cecil A	824.0	757.6	832.9	189.6	195.1	861.5	828.1	855.1	919.5	918.3	854.2	765.5	8 801.4
Cecil B[1]	393.8	162.2	491.2	460.8	416.2	72.3	221.5	301.0	255.6	214.4	315.0	241.3	3 545.3
North Pine A	490.4	511.9	522.2	470.5	413.1	422.7	438.4	422.0	363.4	523.0	448.1	461.7	5 487.4
North Pine A[1]	280.0	35.6	44.5	40.8	19.6	47.1	46.4	45.8	65.6	40.3	58.3	51.6	775.6
North Pine B	67.2	58.3	26.1	51.4	51.9	60.3	118.9	84.9	78.3	91.4	58.7	76.3	823.7
North Pine C	152.8	123.1	152.0	131.9	137.9	149.3	105.5	127.6	106.6	173.6	226.4	120.6	1 707.3
Confidential	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.9	1.9
Totals	2 270.8	1 704.4	2 128.6	1 405.1	1 294.4	1 670.3	1 816.9	1 891.6	1 842.8	2 018.2	2 017.6	1 776.3	21 837.0
Crush—Halfway A	559.3	795.2	755.1	535.4	447.0	426.2	462.8	609.5	348.6	302.5	535.4	573.0	6 350.0
Currant—Halfway A	564.1	415.2	681.1	813.4	731.3	500.6	649.7	608.7	543.2	365.0	466.8	.....	6 339.1
Currant West—Halfway	52.7	14.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	67.0
Eagle—													
Belloy F[1]	.....	.....	.....	.....	.....	28.0	.....	.....	.....	.....	.....	.....	28.0
Siphon A	43.0	35.7	48.5	36.0	35.4	39.8	37.7	64.5	43.9	63.9	43.7	30.5	522.6
Belloy A	.....	.....	.....	.....	.....	109.7	90.6	76.1	86.0	85.4	78.5	71.3	597.6
Belloy B	2 801.8	2 820.6	2 995.8	3 234.9	2 600.0	2 516.1	2 566.3	3 345.3	2 934.5	3 415.3	3 908.8	3 518.8	36 658.2
Belloy F	30 433.8	29 935.2	36 596.0	31 382.5	32 439.9	35 164.6	34 315.3	39 460.1	32 151.4	28 232.7	32 242.1	39 018.1	401 371.7
Totals	33 278.6	32 791:5	39 640.3	34 653.4	35 075.3	37 858.2	37 009.9	42 946.0	35 215.8	31 797.3	36 273.1	42 638.7	439 178.1
Fireweed—													
Dunlevy B[1]	21.8	26.1	42.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	90.4
Dunlevy D	.....	135.8	188.3	107.8	.....	.....	28.1	145.2	84.7	109.4	153.1	95.8	1 048.2
Dunlevy L	.....	50.5	34.5	50.0	5.0	21.2	.....	.....	.....	.....	.....	.....	161.2
Totals	21.8	212.4	265.3	157.8	5.0	21.2	28.1	145.2	84.7	109.4	153.1	95.8	1 299.8
Flatrock—													
Boundary Lake A	15.6	17.2	15.9	15.9	16.2	14.7	16.1	16.1	16.6	27.4	29.8	33.4	234.9
Boundary Lake B	325.6	293.9	376.1	361.3	359.5	344.6	410.8	406.5	375.9	405.8	313.2	321.3	4 294.5
Halfway A[1]	14.0	18.9	10.0	9.6	10.4	20.7	31.6	25.7	41.4	11.4	.....	54.1	247.8
Halfway C	214.1	21.9	.....	108.1	475.3	258.8	384.8	356.9	213.5	325.6	321.9	243.9	2 924.8
Halfway C[1]	130.0	112.7	50.8	43.4	53.5	62.8	49.7	50.8	50.1	40.5	.....	29.3	673.6
Totals	699.3	464.6	452.8	538.3	914.9	701.6	893.0	856.0	697.5	810.7	664.9	682.0	8 375.6
Flatrock West—Halfway A[1]	.....	.....	.....	.....	.....	291.2	865.9	778.4	574.3	711.0	692.1	680.5	4 593.4
Fort St. John—Charlie Lake A	1 009.8	836.3	834.9	651.5	583.9	652.5	572.9	634.3	647.7	777.5	663.4	606.4	8 471.1

[1] Condensate.

Table P7—Monthly Crude Oil and Condensate Production by Fields and Pools—Continued

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Fort St. John Southeast—Siphon A[1]	617.5	522.4	387.5	133.6	59.6	280.2	361.9	312.2	224.9	332.0	198.2	178.3	3 608.3
Inga—													
Inga A	17 522.8	15 495.7	16 018.6	15 940.6	14 788.4	11 153.9	13 874.3	13 644.7	12 782.4	12 690.5	15 233.8	14 125.3	173 271.0
Inga A[1]	117.7	116.1	114.4	1.0	.....	66.4	94.2	96.3	22.7	40.7	.....	9.0	678.5
Inga B	.....	73.8	145.7	87.9	48.1	73.2	76.6	75.3	66.8	23.7	59.5	58.4	789.0
Halfway A[1]	.....	.....	.....	.....	.....	.....	13.7	.....	.....	.....	.....	.....	13.7
Totals	17 640.5	15 685.6	16 278.7	16 029.5	14 836.5	11 293.5	14 058.8	13 816.3	12 871.9	12 754.9	15 293.3	14 192.7	174 752.2
Jedney—													
Baldonnel A[1]	12.2	10.7	3.7	12.1	3.9	4.4	.....	.....	17.9	28.4	27.0	65.0	185.3
Halfway A[1]	8.7	5.9	1.1	4.6	1.7	1.6	.....	.....	6.9	12.0	7.7	6.2	56.4
Totals	20.9	16.6	4.8	16.7	5.6	6.0	.....	.....	24.8	40.4	34.7	71.2	241.7
Mica—													
Mica A	593.7	489.0	643.3	43.0	225.5	781.5	702.1	600.5	477.9	611.9	592.5	601.0	6 361.9
Mica C	60.7	56.9	51.0	52.6	35.6	53.8	50.1	64.0	53.5	41.9	38.8	23.0	581.9
North Pine A	207.1	178.6	211.4	.....	118.7	225.0	206.4	176.8	238.6	248.4	212.0	190.1	2 213.1
Totals	861.5	724.5	905.7	95.6	379.8	1 060.3	958.6	841.3	770.0	902.2	843.3	814.1	9 156.9
Mike—Gething A	509.5	421.5	443.6	.....	.....	.....	.....	.....	.....	.....	.....	416.2	179.08
Milligan Creek—													
Gething B	44.0	54.8	61.9	60.5	59.7	41.2	13.5	.....	.....	.....	.....	.....	335.6
Halfway A	6 342.5	6 185.9	6 975.3	7 128.4	6 687.0	6 566.2	6 999.8	7 292.1	5 866.1	6 463.0	7 526.9	7 240.1	81 273.3
Totals	6 386.5	6 240.7	7 037.2	7 188.9	6 746.7	6 607.4	7 013.3	7 292.1	5 866.1	6 463.0	7 526.9	7 240.1	81 608.9
Milligan Creek West—Halfway A[1]	.....	8.4	4.5	.....	.....	.....	7.0	.....	.....	.....	.....	15.6	35.5
Montney—Halfway C	88.3	17.0	104.7	.....	.....	59.6	63.9	13.9	.....	.....	.....	.....	347.4
Nettle—Gething A	420.0	380.8	164.8	.....	.....	.....	.....	.....	.....	.....	.....	129.3	1 094.9
Nig Creek—Baldonnel A[1]	.....	.....	.....	.....	48.1	105.6	63.9	70.7	78.1	64.0	.....	.....	430.4
North Pine—North Pine B	186.9	184.4	118.8	98.0	115.3	205.8	94.8	81.5	135.9	180.2	192.7	143.5	1 737.8
Oak—													
Cecil B	.....	.....	.....	.....	.....	63.5	7.4	.....	.....	81.8	126.7	105.2	384.6
Halfway A[1]	286.0	668.6	229.5	188.8	331.7	528.6	254.1	200.0	350.3	391.2	376.4	555.7	4 360.9
Halfway B	1 190.1	1 186.8	1 076.2	1 153.3	991.0	1 113.2	999.4	1 083.8	1 049.7	961.2	1 063.2	1 003.6	12 871.5
Totals	1 476.1	1 855.4	1 305.7	1 342.1	1 322.7	1 705.3	1 260.9	1 283.8	1 400.0	1 434.2	1 566.3	1 664.5	17 617.0
Osburn—													
Gething A[1]	.....	13.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	13.3
Baldonnel A[1]	.....	1.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1.6
Belloy A[1]	.....	5.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	5.9
Totals	.....	20.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	20.8
Osprey—Halfway A	400.1	307.4	246.8	322.3	329.1	313.7	263.9	346.9	102.7	293.9	182.9	188.1	3 297.8

Peejay—													
Halfway	11 116.2	9 987.8	12 531.3	11 998.8	12 093.0	11 192.5	11 341.8	10 738.3	9 086.7	10 133.1	12 036.4	11 576.0	133 831.9
Halfway A	181.1	168.3	155.7	166.8	151.1	79.5	136.3	135.1	40.2	69.3	128.3	117.0	1 528.7
Halfway L	52.9	14.2	51.9	49.0	22.9	56.7	40.6	57.2	26.0	90.8	53.8	53.6	569.6
Totals	11 350.2	10 170.3	12 738.9	12 214.6	12 267.0	11 328.7	11 518.7	10 930.6	9 152.9	10 293.2	12 218.5	11 746.6	135 930.2
Peejay West—Halfway A	584.7	495.0	458.1	564.9	218.3	446.6	501.8	584.2	150.5	546.5	585.9	426.3	5 562.8
Pickell—													
Bluesky A[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	0.1	0.1
Halfway A[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6.9	6.9
Totals	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	7.0	7.0
Rigel—													
Bluesky A	.....	.....	.....	.....	.....	.....	.....	.....	76.9	82.7	.....	.....	159.6
Dunlevy A	255.5	265.3	212.7	88.2	68.7	217.0	315.2	273.7	247.0	244.0	251.1	241.5	2 679.9
Dunlevy B	38.4	37.9	25.7	21.8	4.4	.....	.....	.....	.....	.....	.....	.....	128.2
Dunlevy E	164.5	35.1	127.7	112.2	172.4	212.7	181.7	148.1	127.1	161.3	196.4	199.4	1 838.6
Dunlevy F[1]	.....	.....	.....	.....	.....	.....	.....	.....	76.9	82.7	.....	.....	159.6
Dunlevy I	115.0	129.5	63.9	99.5	79.0	83.1	118.9	119.9	127.2	149.9	110.7	137.8	1 334.4
Totals	573.4	467.8	430.0	321.7	324.5	512.8	615.8	541.7	655.1	720.6	558.2	578.7	6 300.3
Septimus—North Pine A	.....	60.2	51.7	13.5	.....	.....	67.6	37.0	26.7	22.8	18.6	15.8	313.9
Siphon—Baldonnel A[1]	.....	.....	.....	7.2	.....	49.4	.....	.....	.....	.....	.....	.....	56.6
Siphon East—Bluesky A[1]	16.9	13.2	15.6	.....	.....	.....	4.0	.....	.....	15.4	14.5	97.6	177.2
Squirrel—North Pine A	302.9	316.7	307.0	236.4	330.8	268.9	254.6	216.5	152.8	139.5	149.0	169.2	2 844.3
Stoddart—													
Cecil A	32.7	34.1	25.0	.....	.....	27.9	26.2	33.7	38.3	29.8	28.8	75.3	351.8
Cecil B	229.5	185.4	115.7	56.1	61.7	.....	116.7	158.3	125.1	89.4	136.4	30.6	1 314.9
Cecil C	.....	.....	.....	.....	.....	.....	.....	88.7	117.4	89.5	147.9	99.9	543.4
North Pine B[1]	.....	1.6	9.4	0.3	5.0	12.2	5.8	.....	.....	.....	.....	.....	34.3
Belloy A[1]	53.8	48.8	24.4	63.1	27.9	46.3	1.8	42.7	37.2	29.1	31.6	.....	406.7
Belloy C	93.1	69.3	77.2	37.1	.....	87.3	311.7	392.6	352.9	336.1	332.2	364.7	2 454.2
Totals	409.1	339.2	251.7	166.6	94.6	173.7	462.2	716.0	670.9	573.9	676.9	570.5	5 105.3
Stoddart South—													
Belloy A	270.5	366.2	312.9	49.5	.....	159.6	133.5	401.0	550.0	707.8	641.5	750.4	4 342.9
Belloy C	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	60.6	59.2	119.8
Totals	270.5	366.2	312.9	49.5	.....	159.6	133.5	401.0	550.0	707.8	702.1	809.6	4 462.7
Stoddart West—													
Cecil B	.....	.....	22.3	.....	.....	.....	.....	.....	43.4	37.7	.....	.....	103.4
North Pine A	86.5	.....	.....	.....	.....	199.1	169.3	149.6	134.0	152.1	146.3	153.2	1 190.1
Doig B	.....	.....	18.4	73.9	136.3	152.6	140.1	162.6	116.3	136.4	143.9	107.1	1 187.6
Belloy A[1]	366.2	225.7	24.1	37.7	330.0	70.5	69.6	221.2	22.6	83.6	267.7	342.8	2 061.7
Belloy C	4 593.0	4 116.2	4 129.8	4 315.1	3 935.6	4 181.4	4 626.9	4 479.4	4 246.5	3 704.4	5 240.5	5 493.7	53 062.5
Belloy D[1]	25.5	11.4	29.6	29.2	27.8	20.2	19.5	24.3	49.4	7.3	.....	.....	244.2
Totals	5 071.2	4 353.3	4 224.2	4 455.9	4 429.7	4 623.8	5 025.4	5 037.1	4 612.2	4 121.5	5 798.4	6 096.8	57 849.5
Two Rivers—Halfway B	118.6	43.7	104.5	65.2	.....	78.7	101.0	112.4	.....	113.3	98.4	95.1	930.9

[1] Condensate.

Table P7—Monthly Crude Oil and Condensate Production by Fields and Pools—Continued

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Weasel—													
Halfway	8 547.6	7 076.1	8 173.4	7 858.6	7 352.2	4 074.7	7 694.8	6 641.2	4 570.3	4 318.8	6 718.6	7 211.6	80 237.9
Halfway B	269.1	205.3	102.2	72.7	90.7	203.7	186.5	201.4	46.5	60.9	182.9	165.2	1 787.1
Totals	8 816.7	7 281.4	8 275.6	7 931.3	7 442.9	4 278.4	7 881.3	6 842.6	4 616.8	4 379.7	6 901.5	7 376.8	82 025.0
Weasel West—													
Halfway A	828.8	818.8	890.1	685.4	604.3	524.5	890.4	788.9	518.7	927.4	760.6	870.2	9 108.1
Halfway B	116.5	70.8	107.6	28.4	65.8	49.7	68.7	51.7	63.2	66.9	9.6	100.5	799.4
Totals	945.3	889.6	997.7	713.8	670.1	574.2	959.1	840.6	581.9	994.3	770.2	970.7	9 907.5
Wildmint—													
Upper Halfway A	266.8	379.1	686.9	509.1	639.0	402.0	442.8	450.9	364.2	410.9	442.7	441.8	5 436.2
Halfway A	2 316.9	1 772.4	2 851.4	3 455.8	3 026.7	2 893.9	2 623.5	2 830.3	2 369.7	.....	2 516.3	3 304.5	29 961.4
Totals	2 583.7	2 151.5	3 538.3	3 964.9	3 665.7	3 295.9	3 066.3	3 281.2	3 733.9	410.9	2 959.0	3 746.3	35 397.6
Willow—													
Gething A	122.8	141.3	122.8	156.7	195.5	121.0	157.6	120.4	87.3	84.4	111.9	82.7	1 504.4
Halfway A[1]	11.0	.....	.....	19.6	.....	.....	.....	.....	.....	.....	20.6	.....	51.2
Totals	133.8	141.3	122.8	176.3	195.5	121.0	157.6	120.4	87.3	84.4	132.5	82.7	1 555.6
Wolf—Halfway A	1 156.1	878.2	961.6	880.5	792.7	748.2	497.7	743.2	500.6	572.4	848.9	769.6	9 349.7
Other Areas—Confidential	.....	.....	.....	.....	.....	.....	12.2	111.1	106.7	276.3	182.2	285.8	974.3
Totals—													
Crude	175 675.3	159 947.2	184 445.1	169 736.1	168 084.8	155 900.2	174 568.1	180 709.2	157 142.0	147 855.7	175 915.9	182 328.9	2 032 308.5
Condensate	3 078.9	2 651.3	1 955.0	1 436.2	1 797.6	2 135.0	2 519.9	2 520.2	2 404.1	2 804.4	2 473.6	2 749.0	28 525.2
Totals	178 754.2	162 598.5	186 400.1	171 172.3	169 882.4	158 035.2	177 088.0	183 229.4	159 546.1	150 660.1	178 389.5	185 077.9	2 060 833.7

[1] Condensate.

Table P8—Monthly Non-associated and Associated Gas Production by Fields and Pools

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Airport—													
Bluesky A	225.6	18.3	22.3	.....	41.5	396.9	42.2	.....	.....	.....	7.7	17.2	771.7
Dunlevy A	629.1	713.9	604.8	352.3	364.7	447.0	398.1	470.1	316.1	598.4	713.1	775.7	6 383.3
Totals	854.7	732.2	627.1	352.3	406.2	843.9	440.3	470.1	316.1	598.4	720.8	792.9	7 155.0
Aitken Creek—													
Gething A	1 040.8	615.2	.....	.....	.....	.....	.....	162.5	1 782.6	2 573.3	.....	.....	6 174.4
Gething A[1]	3 896.3	3 740.9	4 625.3	4 495.3	2 385.8	4 537.4	4 342.9	4 362.7	1 714.7	3 399.6	4 418.1	4 460.2	46 379.2
Totals	4 937.1	4 356.1	4 625.3	4 495.3	2 385.8	4 537.4	4 342.9	4 525.2	3 497.3	5 972.9	4 418.1	4 460.2	52 553.6
Attachie—Upper Kiskatinaw A	2 579.4	3 608.8	1 974.2	603.4	507.3	.....	.....	.....	.....	551.3	.....	608.4	10 432.8
Bear Flat—North Pine A[1]	1 402.5	1 218.1	1 358.9	1 294.2	1 390.7	1 266.8	1 383.0	1 094.0	1 286.7	1 244.6	1 388.5	1 142.8	15 470.8
Beatton River—													
Halfway A[1]	108.4	79.9	95.1	89.0	109.7	113.0	105.9	102.3	68.3	79.9	71.9	92.6	1 116.0
Halfway C[1]	29.0	27.9	85.1	54.5	45.2	57.0	38.7	46.4	.....	47.6	41.6	68.1	541.1
Halfway D[1]	70.9	88.1	57.8	79.7	77.1	81.8	105.1	88.8	28.4	74.9	82.6	87.5	922.7
Totals	208.3	195.9	238.0	223.2	232.0	251.8	249.7	237.5	96.7	202.4	196.1	248.2	2 579.8
Beatton River West—Bluesky A[1]	227.0	387.4	332.8	186.1	158.7	169.6	214.5	224.2	180.8	184.6	195.5	205.0	2 666.2
Beaverdam—Upper Halfway B	2 230.9	1 895.9	2 201.6	2 294.8	1 786.7	2 014.8	1 563.4	1 969.0	1 720.1	1 832.7	1 899.7	1 791.7	23 201.3
Beavertail—													
Gething A	9 727.2	9 237.5	6 993.9	3 335.4	2 155.2	695.4	2 875.4	7 097.9	4 402.2	3 325.5	2 406.8	2 601.2	54 853.6
Halfway B[1]	11.5	10.7	11.1	10.0	10.0	10.1	8.2	9.5	8.2	8.4	12.3	9.1	119.1
Totals	9 738.7	9 248.2	7 005.0	3 345.4	2 165.2	705.5	2 883.6	7 107.4	4 410.4	3 333.9	2 419.1	2 610.3	54 972.7
Beg—													
Baldonnel B	2 522.9	200.2	144.8	2 177.3	.....	1 221.8	2 385.6	5 189.5	2 926.8	3 097.6	.....	4 703.8	24 570.3
Baldonnel C	2 177.9	392.6	.....	.....	.....	.....	.....	2 470.5	1 901.1	1 798.3	2 490.0	1 835.4	13 065.8
Halfway A	8 133.5	3 433.5	1 113.1	5 139.6	4 354.9	5 267.1	5 440.6	8 895.4	7 084.9	8 352.9	3 644.4	6 310.2	67 170.1
Totals	12 834.3	4 026.3	1 257.9	7 316.9	4 354.9	6 488.9	7 826.2	16 555.4	11 912.8	13 248.8	6 134.4	12 849.4	104 806.2
Bernadet—													
Bluesky C	342.3	350.6	229.4	263.3	282.7	269.8	.....	.....	401.8	251.1	420.7	295.4	3 107.1
Dunlevy A	1 189.2	1 093.0	863.3	.....	.....	.....	936.6	542.1	.....	653.5	1 447.6	1 296.4	8 021.7
Totals	1 531.5	1 443.6	1 092.7	263.3	282.7	269.8	936.6	542.1	401.8	904.6	1 868.3	1 591.8	11 128.8
Birch—													
Gething B	55.0	31.9	18.7	.....	.....	11.9	19.6	.....	28.8	20.5	58.2	61.6	306.2
Baldonnel A	320.2	313.3	142.5	274.5	243.4	190.7	127.5	105.8	133.9	21.8	132.5	205.1	2 211.2
Baldonnel B	1 107.1	1 009.6	469.6	.....	387.4	838.7	788.1	255.4	838.1	449.6	1 172.0	1 069.5	8 385.1
Baldonnel C[1]	75.3	150.2	137.6	63.2	.....	66.8	120.6	180.2	135.5	146.6	75.9	163.4	1 315.3
Halfway A	1 085.9	1 039.3	481.2	507.2	413.6	459.3	924.5	593.9	700.6	675.4	1 512.7	936.6	9 330.2
Totals	2 643.5	2 544.3	1 249.6	844.9	1 044.4	1 567.4	1 980.3	1 135.3	1 836.9	1 313.9	2 951.3	2 436.2	21 548.0

[1] Associated gas.

Table P8—Monthly Non-associated and Associated Gas Production by Fields and Pools—Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Blueberry—													
Dunlevy A	438.9	509.6	730.0	564.7	576.2	660.4	758.1	711.9	711.9	758.9	687.1	487.2	7 594.9
Dunlevy B	1 039.1	967.8	1 031.1	726.2	758.1	618.2	302.4	92.1	181.5	364.3	313.9	804.8	7 199.5
Baldonnel B	.....	.....	.....	.....	600.3	399.9	180.2	.....	.....	13.4	5.3	.....	1 199.1
Debolt A[1]	471.1	643.8	842.3	3 002.0	2 592.9	1 826.1	1 370.5	333.5	380.1	295.8	475.3	314.7	12 548.1
Debolt B[1]	1 747.1	1 530.4	1 923.3	3 852.7	4 065.9	2 952.7	3 953.5	1 436.4	1 356.8	1 085.5	1 122.7	1 506.6	26 533.6
Totals	3 696.2	3 651.6	4 526.7	8 145.6	8 593.4	6 457.3	6 564.7	2 573.9	2 630.3	2 517.9	2 604.3	3 113.3	55 075.2
Blueberry West—Baldonnel A	573.8	614.3	336.9	423.8	414.1	175.0	.....	.....	.....	.....	.....	.....	2 537.9
Boundary Lake—													
Bluesky B	138.7	88.4	.....	.....	.....	.....	.....	.....	98.0	116.4	117.9	88.5	647.9
Gething A	679.7	653.1	802.8	697.5	.....	.....	.....	.....	169.2	638.9	749.1	732.3	5 122.6
Baldonnel B	1 560.9	1 530.4	1 673.5	1 223.9	.....	.....	.....	.....	198.8	1 696.2	1 188.5	1 545.7	10 617.9
Baldonnel C	643.5	585.3	737.2	534.9	.....	.....	.....	.....	245.6	840.9	615.6	689.8	4 892.8
Cecil A[1]	3.3	3.2	3.4	2.2	2.6	2.8	3.5	4.4	2.5	2.2	2.6	2.4	35.1
Cecil B[1]	.....	.....	.....	.....	.....	2.1	5.5	6.0	5.0	.....	.....	.....	18.6
Boundary Lake[1]	.....	3.5	1.6	0.3	.....	.....	.....	.....	.....	.....	.....	.....	5.4
Boundary Lake A[1]	7 711.1	7 329.0	7 766.0	6 771.5	6 793.4	5 538.7	7 179.8	7 241.4	6 576.3	5 595.5	6 578.1	6 990.9	82 071.7
Basal Boundary A	165.1	173.4	182.1	161.3	.....	.....	.....	.....	40.3	189.8	169.7	187.9	1 269.6
Halfway A[1]	431.6	296.2	325.7	250.0	66.3	29.2	44.0	13.3	45.2	643.7	836.3	647.5	3 629.0
Totals	11 333.9	10 662.5	11 492.3	9 641.6	6 862.3	5 572.8	7 232.8	7 265.1	7 380.9	9 723.6	10 257.8	10 885.0	108 310.6
Boundary Lake North—													
Halfway B	1 609.7	1 778.3	700.5	976.1	1 371.4	1 677.7	1 475.0	92.2	84.5	536.3	801.6	389.9	11 493.2
Halfway C	867.1	720.5	799.0	727.5	859.2	587.5	709.1	795.3	646.1	724.9	671.1	637.7	8 745.0
Halfway D[1]	89.3	95.5	97.9	78.7	91.0	84.1	104.5	109.4	104.6	104.2	87.6	97.0	1 143.8
Halfway E	192.9	211.3	81.1	187.4	242.4	139.5	194.9	2.3	18.0	137.0	112.8	38.3	1 557.9
Totals	2 759.0	2 805.6	1 678.5	1 969.7	2 564.0	2 488.8	2 483.5	999.2	853.2	1 502.4	1 673.1	1 162 9	22 939.9
Bubbles—Baldonnel A	4 684.2	1 733.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	6 417.4
Bubbles North—Baldonnel A	2 491.8	2 142.0	1 190.5	1 860.1	100.0	293.6	.....	2 170.4	1 767.6	2 154.5	1 337.8	834.0	1 632.3
Buick Creek—													
Bluesky A	295.5	679.1	552.4	685.2	640.1	555.4	670.1	833.7	516.4	413.3	.....	.....	5 841.2
Bluesky B	.....	.....	.....	.....	.....	.....	.....	.....	151.3	72.3	.....	22.0	245.6
Bluesky C	2 752.7	3 004.7	2 219.1	1 124.1	.....	.....	990.2	2 862.2	2 310.0	2 026.0	1 853.7	1 035.2	20 177.9
Bluesky D	574.2	294.4	197.0	120.0	85.5	178.4	130.4	131.3	28.4	.....	.....	226.1	1 965.7
Gething A	235.3	204.5	124.1	263.6	210.9	208.4	166.5	190.9	55.2	54.4	273.3	173.7	2 160.8
Dunlevy A	9 791.6	9 677.5	6 102.8	4 651.4	991.0	221.7	2 780.0	5 408.5	4 794.1	4 857.3	3 565.5	2 623.6	55 465.0
Dunlevy B	6 924.6	4 840.8	3 818.2	2 844.1	3 636.9	1 764.4	2 362.1	3 150.9	1 421.0	818.5	1 980.0	2 409.1	35 970.6
Dunlevy C	3 140.6	3 265.2	2 047.2	1 946.8	1 779.2	2 224.1	1 872.5	2 584.3	1 828.3	1 375.5	1 711.7	2 900.3	26 675.7
Dunlevy G	88.6	90.4	60.2	40.7	54.1	26.1	.....	.....	.....	35.7	80.9	.....	476.7
Dunlevy H	5 305.3	4 623.0	2 584.1	1 681.1	2 404.5	1 752.3	1 588.1	1 950.2	2 318.4	1 137.5	4 414.2	4 319.4	34 078.1
Dunlevy I	3 641.5	3 179.8	1 411.0	.....	394.9	.....	165.7	1 065.8	.....	347.3	3 763.2	3 789.7	17 758.9
Dunlevy K	1 942.6	1 599.8	761.6	1 446.8	264.8	.....	.....	.....	.....	.....	128.2	.....	6 143.8
Doig A[1]	.....	1 375.7	2 260.6	2 526.0	2 417.0	1 522.3	2 095.4	2 316.4	2 134.1	2 095.6	2 078.9	1 912.9	22 734.9
Totals	34 692.5	32 834.9	22 138.3	17 329.8	12 878.9	8 453.1	12 821.0	20 494.2	15 557.2	13 233.4	19 849.6	19 412.0	229 694.9

Buick Creek North—													
Bluesky A	3 956.8	3 643.2	2 100.2	1 868.5	2 714.7	2 905.4	1 916.8	2 161.3	1 893.0	2 191.6	3 330.5	3 436.9	32 118.9
Dunlevy A	1 486.4	1 721.7	1 011.0	1 409.2	1 914.0	1 088.3	992.4	570.3	992.2	186.1	.....	.....	11 371.6
Dunlevy B	1 017.8	815.3	635.6	324.2	318.9	444.1	605.8	734.2	519.5	324.0	661.3	801.6	7 202.3
Totals	6 461.0	6 180.2	3 746.8	3 601.9	4 947.6	4 437.8	3 515.0	3 465.8	3 404.7	2 701.7	3 991.8	4 238.5	506 692.8
Buick Creek West—													
Bluesky A	5 737.2	5 432.0	3 561.9	3 246.5	2 744.6	3 314.4	1 918.5	1 086.5	713.6	915.0	5 738.2	5 351.2	39 759.6
Bluesky C	162.2	56.0	.....	.....	177.9	83.6	0.3	.....	23.8	139.1	117.9	57.2	818.0
Dunlevy A	1 637.7	1 395.1	1 383.1	887.7	1 322.5	1 568.2	1 107.0	207.7	871.1	1 020.0	56.8	199.4	11 656.3
Dunlevy B	2 962.6	1 898.1	1 059.2	2 137.3	1 667.3	1 757.2	1 547.9	1 855.5	1 820.0	2 656.9	1 205.7	1 521.6	22 089.3
Dunlevy D[1]	7.9	5.8	5.3	.....	.....	5.9	8.7	8.2	4.3	8.5	6.6	14.9	76.1
Baldonnel A	30.3	29.8	23.0	24.1	54.6	36.9	28.0	44.5	90.4	92.3	94.9	96.6	645.4
Halfway A	.....	400.0	642.0	.....	.....	.....	324.9	495.9	135.1	.....	.....	.....	1 997.9
Totals	10 537.9	9 216.8	6 674.5	6 295.6	5 966.9	6 766.2	4 935.3	3 698.3	3 658.3	4 831.8	7 220.1	7 240.9	77 042.6
Bulrush—													
Halfway A[1]	1 453.8	1 527.8	1 728.6	1 625.2	1 646.6	1 572.3	1 546.7	1 427.2	1 663.4	1 665.5	589.4	1 083.9	17 530.4
Halfway B[1]	79.4	146.5	57.9	156.0	125.8	108.4	86.2	114.1	117.5	127.1	88.8	126.1	1 333.8
Totals	1 533.2	1 674.3	1 786.5	1 781.2	1 772.4	1 680.7	1 632.9	1 541.3	1 780.9	1 792.6	678.2	1 210.0	18 864.2
Bullmoose—Baldonnel A	2 459.0	12 236.6	21 723.9	17 926.8	7 502.0	....	2 290.2	.....	.....	.....	.....	.....	64 141.5
Cabin—													
Slave Point B	3 703.4	3 641.6	3 551.7	3 731.6	3 381.5	3 720.0	1 441.3	.....	.....	2 585.9	3 417.4	4 621.5	33 795.9
Slave Point C	1 367.7	1 718.5	2 173.6	1 666.4	585.3	.....	.....	.....	.....	343.4	997.3	970.6	9 822.8
Slave Point D	2 481.3	1 932.5	2 343.3	.....	.....	.....	.....	.....	.....	.....	1 757.2	1 698.2	10 212.5
Totals	7 552.4	7 292.6	8 068.6	5 398.0	3 966.8	3 720.0	1 441.3	.....	.....	2 929.3	6 171.9	7 290.3	53 831.2
Cache Creek—													
Coplin A	2 632.2	2 632.4	1 651.4	1 466.6	1 102.3	504.6	1 159.8	1 125.5	1 891.3	1 085.3	840.6	1 275.4	17 367.4
Halfway A	5 049.9	6 820.7	5 415.5	2 735.8	4 280.5	2 689.4	1 668.7	2 976.8	2 268.1	798.2	.....	894.9	35 598.5
Totals	7 682.1	9 453.1	7 066.9	4 202.4	5 382.8	3 194.0	2 828.5	4 102.3	4 159.4	1 883.5	840.6	2 170.3	52 965.9
Cecil Lake—													
Siphon A[1]	17.1	16.2	17.1	12.0	15.7	19.0	21.5	23.8	20.5	13.4	21.1	14.2	211.6
Cecil A[1]	77.2	73.9	80.6	14.8	12.2	78.8	69.0	75.1	81.9	88.5	81.8	68.7	802.5
Cecil B	706.6	281.5	884.4	797.3	824.9	154.2	370.4	771.8	399.7	408.7	559.1	267.9	6 426.5
North Pine A	3 937.8	2 369.4	2 293.6	2 439.4	2 721.7	2 435.4	2 241.6	1 780.9	2 045.7	2 037.2	2 166.7	2 514.7	28 984.1
North Pine A[1]	706.5	680.8	712.6	736.3	702.6	715.8	668.3	688.8	622.6	872.4	820.8	854.0	8 781.5
North Pine B[1]	9.7	5.4	6.4	3.2	5.0	7.1	18.8	18.3	17.4	15.9	12.2	8.3	127.7
North Pine C[1]	139.3	125.2	168.1	154.5	171.7	170.5	118.9	176.0	141.1	180.6	169.7	176.3	1 891.9
Totals	5 594.2	3 552.4	4 162.8	4 157.5	4 453.8	3 580.8	3 508.5	3 534.7	3 328.9	3 616.7	3 831.4	3 904.1	47 225.8
Clark Lake—Slave Point A	133 118.7	138 209.3	59 010.3	49 783.8	50 211.5	60 562.3	7 143.6	7 055.6	112 625.3	109 486.1	92 012.0	116 645.9	935 864.4
Commotion—Baldonnel A	3 050.0	3 320.6	8 166.2	574.3	.....	.....	.....	.....	.....	6 375.1	3 912.4	4 935.8	30 334.4
Crush—Halfway A[1]	375.8	412.6	398.8	352.1	317.2	255.2	276.1	336.9	237.8	295.7	333.7	449.7	4 041.6
Currant--Halfway A	203.5	233.4	102.5	111.3	110.0	61.5	114.9	734.1	696.9	660.6	637.2	....	3 666.9
Currant West—													
Halfway A	1 061.7	2 095.6	1 678.1	.....	.....	.....	.....	.....	.....	95.6	1 232.5	1 684.6	7 848.1
Halfway B[1]	2.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2.9
Totals	1 064.6	2 095.6	1 678.1	.....	.....	.....	.....	.....	.....	95.6	1 232.5	1 684.6	7 851.0
Dahl—Bluesky A	21 946.2	15 131.4	10 671.9	12 101.2	8 509.7	2 105.8	8 855.6	15 373.8	12 239.6	11 762.4	9 035.6	7 811.4	135 544.6
Doe—Wabamun A	.....	353.2	751.7	554.7	557.8	613.9	593.0	940.6	423 2	.....	852.6	543.0	6 183.7

[1] Associated gas.

Table P8—Monthly Non-associated and Associated Gas Production by Fields and Pools—Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Eagle—													
Siphon A[1]	8.1	9.2	8.2	21.2	17.0	13.9	12.9	21.8	8.0	17.2	17.1	5.6	160.2
Cecil A	1 149.3	857.2	504.4	355.1	642.1	651.0	626.9	586.6	276.3	.....	383.9	311.5	6 344.3
Belloy A[1]	.....	.....	.....	4.2	.....	18.0	13.1	17.3	12.0	9.8	9.1	8.9	92.4
Belloy B[1]	316.7	408.5	451.0	630.7	624.3	351.2	410.0	514.6	425.7	514.9	698.3	545.9	5 891.8
Belloy F	907.2	794.8	913.1	7.4	.....	.....	.....	.....	.....	.....	.....	.....	2 622.5
Belloy F[1]	3 711.2	3 754.3	4 396.6	3 574.9	3 567.4	3 967.2	3 413.1	3 765.0	2 993.2	2 823.9	2 715.0	4 221.5	42 903.3
Lower Belloy B	306.9	183.6	76.3	.....	.....	.....	.....	.....	.....	.....	.....	.....	566.8
Totals	6 399.4	6 007.6	6 349.6	4 593.5	4 850.8	5 001.3	4 476.0	4 905.3	3 715.2	3 365.8	3 823.4	5 093.4	58 581.3
Ekwan—													
Slave Point A	.....	.....	2 140.0	4 969.4	2 923.8	816.1	.....	.....	.....	1 331.2	1 372.5	.....	13 553.0
Slave Point B	.....	.....	93.9	143.8	139.2	60.1	.....	.....	.....	169.0	142.8	.....	748.8
Totals	.....	.....	2 233.9	5 113.2	3 063.0	876.2	.....	.....	.....	1 500.2	1 515.3	.....	14 301.8
Farrell Creek—													
Charlie Lake A	1 025.1	928.7	512.1	187.3	1 394.9	1 184.6	508.6	.....	1 095.2	667.3	888.9	670.2	9 062.9
Halfway A	163.6	132.6	80.3	.....	.....	.....	.....	.....	.....	.....	253.0	174.0	803.5
Halfway B	501.7	481.3	211.5	242.1	813.0	606.4	225.3	.....	679.5	257.5	.....	.....	4 018.3
Totals	1 690.4	1 542.6	803.9	429.4	2 207.9	1 791.0	733.9	.....	1 774.7	924.8	1 141.9	844.2	13 884.7
Fireweed—													
Bluesky A	2 032.8	2 348.9	1 513.3	1 572.4	1 879.9	880.1	.....	.....	771.1	716.0	20.6	885.3	12 620.4
Dunlevy A	2 563.6	2 249.6	854.1	1 116.5	1 529.1	1 516.4	.....	.....	336.5	390.7	186.0	.....	10 742.5
Dunlevy B	1 151.5	1 167.5	675.7	895.0	882.4	707.7	255.6	.....	75.2	71.9	.....	654.4	6 537.0
Dunlevy C	537.1	1 097.8	545.1	.....	438.2	959.2	.....	.....	.....	35.1	.....	.....	3 607.5
Dunlevy D	3 046.9	2 713.4	1 461.6	2 292.2	2 384.4	1 808.7	.....	528.8	775.9	395.5	.....	922.6	16 330.0
Dunlevy D[1]	.....	6.2	14.3	7.6	.....	.....	2.8	41.0	22.9	38.1	38.3	28.8	200.0
Dunlevy F	1 668.3	1 374.0	528.1	1 233.7	1 183.2	1 184.7	256.4	.....	387.8	427.5	197.8	1 611.6	10 053.1
Dunlevy H	893.7	1 030.7	445.1	416.6	389.9	159.4	399.0	483.6	351.7	108.8	957.1	1 284.2	6 919.8
Dunlevy L[1]	.....	3.1	5.7	4.6	0.6	0.9	0.5	.....	.....	.....	.....	.....	15.4
Baldonnel A	137.7	105.6	85.2	.....	.....	105.2	.....	.....	10.3	45.6	.....	34.5	524.1
Totals	12 026.7	12 096.8	6 128.2	7 538.6	8 687.7	7 322.3	914.3	1 053.4	2 731.4	2 229.2	1 399.8	5 421.4	67 549.8
Flatrock—													
Siphon A	1 728.2	1 594.3	1 025.1	446.9	445.3	499.1	444.7	.....	493.0	2 049.0	2 065.8	2 419.1	13 210.5
Siphon B	810.7	1 390.4	535.0	427.0	171.5	186.1	136.8	139.5	255.2	187.8	.....	83.3	4 323.3
Boundary Lake A[1]	4.4	7.2	7.8	9.9	11.4	13.0	6.8	6.7	12.1	14.4	10.6	8.9	113.2
Boundary Lake B[1]	37.9	33.1	42.8	55.0	25.4	121.1	159.2	195.0	110.6	172.6	125.3	91.3	1 169.3
Halfway A	173.2	324.2	119.3	295.8	239.8	282.5	419.2	326.8	440.4	107.3	.....	561.0	3 289.5
Halfway B	234.4	370.4	209.1	316.0	438.4	416.3	338.9	.....	220.0	115.8	128.5	588.7	3 376.5
Halfway C	2 031.1	2 147.7	1 167.2	1 290.2	1 536.7	904.7	1 927.6	2 524.8	2 237.1	2 020.0	555.9	314.6	18 657.6
Halfway C[1]	212.7	15.3	.....	34.9	406.5	284.4	427.9	351.2	245.2	407.5	354.5	188.4	2 928.5
Totals	5 232.6	5 882.6	3 106.3	2 875.7	3 275.0	2 707.2	3 861.1	3 544.0	4 013.6	5 074.4	3 240.6	4 255.3	47 068.4
Flatrock West—Halfway A	1 337.1	1 311.4	635.6	341.3	.....	1 316.5	3 446.5	2 698.4	1 618.6	1 318.3	2 390.1	2 209.2	18 623.0

[1] Associated gas.

Fort St. John—													
Baldonnel A	1 740.6	1 499.5	982.2	.....	.....	457.7	.....	193.6	1 352.9	1 650.1	1 284.8	1 620.5	10 781.9
Baldonnel B	199.0	1 329.8	.....	.....	.....	.....	.....	.....	27.3	154.4	176.0	41.1	1 927.6
Charlie Lake A[1]	808.5	786.8	907.0	530.5	363.8	509.3	386.3	380.3	357.6	682.7	767.1	834.4	7 314.3
Halfway A	571.7	419.0	419.0	.....	.....	76.6	.....	29.2	336.5	584.6	576.7	503.9	3 517.2
Halfway C	2 794.2	1 194.1	465.2	1 504.8	2 973.2	1 666.3	1 014.6	1 370.8	1 128.7	1 301.1	3 314.9	2 509.4	21 237.3
Belloy A	115.1	113.8	96.2	.....	.....	55.3	.....	60.6	37.9	147.8	146.4	137.7	910.8
Totals	6 229.1	5 343.0	2 869.6	2 035.3	3 337.0	2 765.2	1 400.9	2 034.5	3 240.9	4 520.7	6 265.9	5 647.0	45 689.1
Fort St. John Southeast—													
Baldonnel A	1 104.6	952.5	737.3	1 034.2	1 065.3	897.1	919.2	923.1	839.1	981.2	932.1	942.4	11 328.1
Siphon A	1 960.6	1 907.7	1 547.0	456.6	87.0	522.3	1 057.3	1 602.9	1 188.3	1 816.4	1 156.6	1 276.5	14 579.2
Halfway A	1 397.6	1 158.7	1 040.6	1 352.5	1 421.7	744.8	1 186.1	1 280.5	1 038.3	1 144.4	749.9	806.4	13 321.5
Belloy A	2 990.0	2 504.1	2 354.3	2 812.2	2 863.8	1 680.6	2 292.6	2 329.5	1 749.7	2 581.7	2 543.7	2 481.3	29 183.5
Totals	7 452.8	6 523.0	5 679.2	5 655.5	5 437.8	3 844.8	5 455.2	6 136.0	4 815.4	6 523.7	5 382.3	5 506.6	68 412.3
Goose—													
North Pine A	41.2	.....	64.2	95.3	97.5	29.7	.....	148.7	196.3	217.4	229.5	258.5	1 378.3
North Pine B	165.8	6.4	26.3	129.0	277.8	152.4	.....	48.7	2.6	182.7	243.3	403.9	1 638.9
Totals	207.0	6.4	90.5	224.3	375.3	182.1	.....	197.4	198.9	400.1	472.8	662.4	3 017.2
Gopher—Halfway A	1 003.4	858.8	443.7	419.0	439.2	483.4	445.1	442.6	55.9	.....	477.4	663.9	5 732.4
Gote—Sulphur Point A	5 363.0	3 875.0	3 047.2	1 381.2	1 273.3	1 528.6	931.6	.....	2 796.6	4 905.6	4 182.2	5 100.1	34 384.4
Graham—													
Dunlevy A	268.7	235.8	103.4	140.8	210.5	165.3	225.5	186.7	157.8	182.5	176.5	26.0	2 079.5
Debolt A	2 586.8	2 309.4	1 030.0	1 466.2	1 905.1	1 713.0	1 615.1	1 171.6	844.4	1 100.7	1 175.6	627.6	17 545.5
Totals	2 855.5	2 545.2	1 133.4	1 607.0	2 115.6	1 878.3	1 840.6	1 358.3	1 002.2	1 283.2	1 352.1	653.6	19 625.0
Grizzly North—													
Dunlevy A	5 149.7	4 403.1	10 861.8	2 569.5	4 249.5	222.1	841.1	184.5	173.4	172.1	2 061.1	1 645.9	32 533.8
Halfway A	.....	.....	13 923.0	1 926.1	.....	.....	1 035.9	.....	.....	.....	.....	.....	16 885.0
Totals	5 149.7	4 403.1	24 784.8	4 495.6	4 249.5	222.1	1 877.0	184.5	173.4	172.1	2 061.1	1 645.9	49 418.8
Grizzly South—Dunlevy A	7 174.5	3 841.5	10 403.9	1 107.6	4 553.9	.....	273.7	.....	.....	.....	1 103.4	739.6	29 198.1
Gundy Creek—													
Dunlevy A	30.7	48.4	26.5	33.7	32.0	45.8	53.0	43.9	45.9	42.9	39.1	5.4	447.3
Baldonnel A	181.7	185.9	135.0	136.8	.....	.....	.....	16.6	68.5	56.5	77.6	62.8	921.4
Baldonnel B	862.3	747.0	574.7	468.7	502.0	667.1	618.0	814.7	730.4	835.2	739.1	426.9	7 986.1
Totals	1 074.7	981.3	736.2	639.2	534.0	712.9	671.0	875.2	844.8	934.6	855.8	495.1	9 354.8
Gundy Creek West—													
Dunlevy A	1 470.1	1 482.0	895.2	1 255.0	1 368.1	1 154.7	1 382.4	1 238.0	1 231.8	1 348.0	1 171.7	914.5	14 911.5
Baldonnel A	1 273.3	1 075.5	866.3	893.1	836.3	611.3	941.1	944.4	787.6	868.0	1 020.1	221.1	10 338.1
Totals	2 743.4	2 557.5	1 761.5	2 148.1	2 204.4	1 766.0	2 323.5	2 182.4	2 019.4	2 216.0	2 191.8	1 135.6	25 249.6
Helmet—													
Jean Marie A	898.6	771.4	522.6	507.7	1 027.3	917.3	414.7	.....	.....	53.0	.....	9.8	5 122.4
Slave Point A	28 701.0	38 791.8	42 538.6	16 231.8	11 187.6	9 980.7	2 079.3	.....	13 837.4	15 885.7	21 691.6	25 501.0	224 426.5
Slave Point B	1 145.2	1 195.5	1 199.1	1 144.0	1 203.6	1 110.4	510.1	.....	.....	25.9	1 151.2	1 492.3	10 177.3
Slave Point C	97.9	.....	1 830.2	912.0	392.5	401.7	193.9	.....	.....	.....	.....	.....	3 828.2
Totals	30 842.7	40 758.7	46 090.5	18 795.5	13.811.0	12 410.1	3 198.0	.....	13 837.4	15 964.6	22 842.8	25 003.1	243 554.4

[1] Associated gas.

Table P8—Monthly Non-associated and Associated Gas Production by Fields and Pools—Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Helmet North—													
Jean Marie A	2 785.1	2 675.1	2 691.3	2 308.2	6.4	.....	.....	.....	.....	.....	1 677.9	2 233.4	14 377.4
Jean Marie B	217.1	256.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	473.7
Confidential	.....	.....	203.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	203.0
Totals	3 002.2	2 931.7	2 894.3	2 308.2	6.4	.....	.....	.....	.....	.....	1 677.9	2 233.4	15 054.1
Hoffard—Slave Point A	692.0	527.3	189.9	515.3	121.5	.....	.....	.....	.....	1 288.9	951.1	843.0	5 129.0
Inga—													
Gething A	96.9	91.7	63.2	188.7	246.9	77.4	95.5	71.3	147.5	88.6	162.3	161.3	1 491.3
Dunlevy A	2 036.7	2 128.3	888.3	858.4	1 160.2	1 360.6	887.6	1 629.0	1 417.0	2 169.5	2 117.4	2 006.8	18 659.8
Coplin A	1 450.9	1 312.3	715.6	342.1	270.9	728.8	324.7	331.7	820.5	1 485.4	1 504.4	1 552.3	10 839.6
Inga A	8 529.0	8 123.9	7 845.6	5 365.6	4 260.2	5 640.1	5 770.2	10 245.8	6 331.9	7 011.7	6 322.7	4 737.7	80 184.4
Inga A[1]	4 942.1	4 186.2	4 102.5	4 001.0	4 009.4	3 269.4	3 350 2	3 231.8	3 539.6	3 594.4	3 670.1	3 736 6	45 633.3
Inga B[1]	.....	25.2	52.1	38.1	26.6	43.0	41.2	33.0	37.1	13.9	26.3	30.9	367.4
Halfway A	.....	.....	.....	.....	.....	.....	309.6	.....	.....	.....	.....	.....	309.6
Totals	17 055.6	15 867.6	13 667.3	10 793.9	9 974.2	11 119.3	10 779.0	15 542.6	12 293.6	14 363.5	13 803.2	12 225.6	157 485.4
Jedney—													
Baldonnel A	13 094.4	10 149.6	462.7	11 805.7	12 226.1	6 360.4	3 961.6	6 826.4	7 368.9	8 268.6	7 604.1	10 785.0	98 913.5
Halfway A	8 880.1	5 545.1	134.0	5 601.0	5 439.1	3 204.2	2 165.8	4 033.2	3 981.4	5 524.4	4 091.8	6 658.6	55 258.7
Totals	21 974.5	15 694.7	596.7	17 406.7	17 665.2	9 564.6	6 127.4	10 859.6	11 350.3	13 793.0	11 695.9	17 443.6	154 172.2
Julienne Creek North—Debolt A	2 035.8	1 528.5	1 438.8	1 537.1	531.2	804.5	953.9	1 362.4	1 039.4	1 246.5	1 089.5	733.2	14 300.8
Julienne Creek South—													
Debolt A	269.2	172.5	119.6	.....	.....	.....	.....	.....	.....	.....	.....	.....	561.3
Debolt B	202.6	193.0	135.6	70.4	.....	96.1	113.8	20.8	33.8	143.1	138.8	127.1	1 275.1
Totals	471.8	365.5	255.2	70.4	.....	96.1	113.8	20.8	33.8	143.1	138.8	127.1	1 836.4
Junior—													
Slave Point A	.....	.....	.....	3 996.0	6 559.9	3 880.6	482.3	.....	.....	3 195.3	4 531.1	7 820.8	30 466.0
Slave Point D	.....	.....	.....	1 052.3	.....	.....	884.6	.....	.....	.....	11 263.1	111.0	13 311.0
Totals	.....	.....	.....	5 048.3	6 559.9	3 880.6	1 366.9	.....	.....	3 195.3	15 794.2	7 931.8	43 777.0
Klua—													
Debolt A	71.1	63.3	63.4	5.1	.....	.....	.....	.....	.....	12.6	52.4	48.8	316.7
Slave Point B	8 246.3	6 711.7	7 580.1	3 044.1	2 911.6	2 792.9	1 310.8	.....	3 505.6	4 777.3	4 216.0	4 189.7	49 286.1
Slave Point D	6 768.9	5 254.8	3 726.3	2 101.7	2 512.1	1 935.2	999.4	.....	2 640.8	308.8	2 808.2	2 745.4	31 801.6
Slave Point E	498.9	473.1	494.1	627.2	476.5	408.7	227.5	.....	262.9	39.4	.....	.....	3 508.3
Pine Point A	6 002.9	5 280.9	5 717.5	299.8	.....	.....	.....	.....	.....	121.1	5 002.3	5 931.8	28 356.3
Pine Point B	7 345.9	6 764.3	5 954.8	480.2	.....	.....	.....	.....	.....	142.1	6 234.8	7 004.9	33 927.0
Totals	28 934.0	24 548.1	23 536.2	6 558.1	5 900.2	5 136.8	2 537.7	.....	6 409.3	5 401.3	18 313.7	19 920.6	147 196.0
Kobes—													
Dunlevy A	747.5	676.4	544.9	333.4	776.8	184.9	240.7	155.6	74.4	105.1	197.2	414.1	4 451.0
Charlie Lake A	439.9	441.2	336.2	397.5	447.1	.....	.....	.....	.....	.....	.....	271.3	2 333.2
Charlie Lake B	709.0	3 341.1	3 353.4	329.1	684.1	274.7	319.5	273.6	421.8	408.9	.....	1 344.9	11 460.1
Charlie Lake D	.....	.....	133.6	158.1	128.4	.....	11.2	48.0	41.7	46.7	.....	.....	567.7
Halfway A	6 229.2	3 047.0	2 500.2	2 764.0	5 235.9	2 845.3	2 119.1	2 036.7	1 842.3	1 945.1	.....	287.7	30 852.5
Halfway B	1 405.1	1 188.8	566.3	.....	.....	774.4	.....	792.2	1 056.0	1 556.9	1 370.4	1 060.1	9 770.2
Debolt A	1 594.7	1 353.1	1 249.8	1 169.3	1 402.9	.....	230.4	479.4	382.3	334.2	.....	123.7	8 319.8
Totals	11 125.4	10 047.6	8 684.4	5 151.4	8 675.2	4 079.3	2 920.9	3 785.5	3 818.5	4 396.9	1 567.6	3 501.8	67 754.5

Kobes West—Inga A	1 475.4	1 359.1	1 082.2	543.1	572.9	835.2	425.1	668.3	534.1	149.2	1 647.2	1 351.9	10 643.7
Kotcho Lake—													
Slave Point A	2 623.6	4 469.6	6 929.2	4 656.5	4 302.9	1 814.5	.....	.....	.....	.....	.....	3 185.4	27 981.7
Slave Point C	2 953.6	783.2	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 640.8	5 377.6
Totals	5 577.2	5 252.8	6 929.2	4 656.5	4 302.9	1 814.5	.....	.....	.....	.....	.....	4 826.2	33 359.3
Kotcho Lake East—													
Bluesky B	924.0	819.9	915.9	812.7	491.3	.....	.....	.....	.....	936.3	.....	.....	4 900.1
Slave Point B	1 115.1	738.4	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 853.5
Slave Point C	6 450.3	10 331.6	8 429.2	4 391.9	4 996.4	4 588.7	1 982.7	.....	4 799.4	11 728.1	7 926.0	9 438.7	75 063.0
Totals	8 489.4	11 889.9	9 345.1	5 204.6	5 487.7	4 588.7	1 982.7	.....	4 799.4	12 664.4	7 926.0	9 438 7	81 816.6
Laprise Creek—													
Baldonnel A	43 359.7	25 757.5	6 686.3	32 196.7	38 380.3	33 324.0	40 718.0	50 263.5	40 244.8	31 654.8	21 473.2	39 364.0	403 422.8
Baldonnel B	8 509.1	5 506.9	4 242.8	9 149.0	5 846.4	10 459.0	10 837.0	14 032.3	12 103.2	10 872.5	13 943.5	8 349.7	113 851.4
Nancy A	465.4	336.5	113.5	433.2	434.4	62.9	326.6	410.5	415.2	387.9	500.6	21.7	3 908.4
Totals	52 334.2	31 600.9	11 042.6	41 778.9	44 661.1	43 845.9	51 881.6	64 706.3	52 763.2	42 915.2	35 917.3	47 735.4	521 182.6
Laprise Creek West—Baldonnel A	173.9	255.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	429.4
Louise—Slave Point A	3 452.4	2 936.6	3 101.1	2 589.4	2 132.7	1 995.4	854.2	.....	.....	720.8	2 453.3	2 994.6	23 230.5
Mica—													
Mica A[1]	146.2	110.2	146.5	47.3	12.1	232.2	208.3	217.4	149.2	133.7	135.0	176.8	1 714.9
Mica C[1]	26.1	26.5	27.1	27.7	28.3	26.1	30.0	30.2	24.2	22.0	19.8	5.5	293.5
North Pine A[1]	22.7	20.8	22.7	.....	2.5	35.7	44.8	37.9	34.3	39.6	37.4	41.0	339.4
Totals	195.0	157.5	196.3	75.0	42.9	294.0	283.1	285.5	207.7	195.3	192.2	223.3	2 347.8
Mike—													
Gething A	221.7	249.3	230.4	.....	.....	.....	.....	.....	.....	.....	.....	121.4	822.8
Gething B	.....	12.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	12.7
Totals	221.7	262.0	230.4	.....	.....	.....	.....	.....	.....	.....	.....	121.4	835.5
Milligan Creek—													
Gething A	88.8	81.0	81.9	82.2	81.0	118.5	115.4	113.2	106.3	113.5	106.4	108.7	1 196.9
Gething B[1]	46.3	50.9	66.4	88.8	95.5	78.3	79.8	.....	11.0	28.5	.....	.....	545.5
Halfway A[1]	908.7	1 053.6	1 325.6	1 248.6	1 434.8	1 363.4	1 451.4	1 495.0	1 243.0	1 296.1	1 882.9	1 908.1	16 611.2
Totals	1 043.8	1 185.5	1 473.9	1 419.6	1 611.3	1 560.2	1 646.6	1 608.2	1 360.3	1 438.1	1 989.3	2 016.8	18 353.6
Milligan Creek West—Halfway B	1 822.3	3 476.8	1 193.2	482.8	1 158.1	484.4	755.0	.....	.....	.....	2 098.5	2 768.6	14 239.7
Monias—													
Halfway A	26 906.4	15 274.5	.....	20 969.1	24 883.9	25 407.0	26 976.0	29 535.2	12 743.6	20 737.5	17 835.2	10 792.7	232 061.1
Taylor Flat A	.....	.....	.....	.....	1 276.6	770.2	1 454.3	1 769.4	677.5	578.4	.....	.....	6 526.4
Taylor Flat B	.....	36.7	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	36.7
Totals	26 906.4	15 311.2	.....	20 969.1	26 160.5	26 177.2	28 430.3	31 304.6	13 421.1	21 315.9	17 835.2	10 792.7	238 624.2
Montney—Halfway C[1]	112.8	32.5	121.2	.....	.....	50.5	72.2	16.2	.....	.....	.....	.....	405.4

[1] Associated gas.

Table P8– Monthly Non-associated and Associated Gas Production by Fields and Pools—Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Nettle—													
Gething A[1]	969.7	1 093.0	490.7	.....	.....	.....	.....	.....	.....	.....	.....	670.0	3 223.4
Siphon A	954.3	1 224.4	610.7	.....	.....	.....	.....	.....	.....	.....	560.0	1 283.1	4 632.5
Halfway A	659.7	892.5	624.8	1 921.5	1 397.3	1 550.0	896.8	.....	.....	.....	955.0	840.4	9 738.0
Totals	2 583.7	3 209.9	1 726.2	1 921.5	1 397.3	1 550.0	896.8	.....	.....	.....	1 515.0	2 793.5	17 593.9
Nig Creek—Baldonnel A	15 838.0	16 911.0	13 901.0	13 629.2	12 983.9	6 057.9	9 197.1	12 184.4	10 679.0	12 123.9	7 837.9	2 776.6	134 119.9
North Pine—													
North Pine B	322.0	7.5	.....	755.6	1 010.9	643.0	1 010.3	934.5	395.2	.....	.....	598.3	5 677.3
North Pine B[1]	526.0	440.2	452.1	331.1	432.7	550.6	444.7	304.2	417.0	543.7	538.1	467.3	5 447.7
Totals	848.0	447.7	452.1	1 086.7	1 443.6	1 193.6	1 455.0	1 238.7	812.2	543.7	538.1	1 065.6	11 125.0
Oak—													
Cecil B[1]	.....	.....	.....	.....	.....	9.0	5.3	.....	.....	13.0	15.3	10.4	53.0
Halfway A	4 733.7	9 099.5	3 330.3	4 334.7	4 094.2	6 227.1	5 737.0	3 713.5	4 408.2	1 913.4	1 476.9	2 916.8	51 985.3
Halfway B[1]	225.7	300.4	252.5	305.4	249.7	343.7	280.8	259.9	174.7	241.9	237.4	151.2	3 023.3
Totals	4 959.4	9 399.9	3 582.8	4 640.1	4 343.9	6 579.8	6 023.1	3 973.4	4 582.9	2 168.3	1 729.6	3 078.4	55 061.6
Osborn—													
Gething A	.....	192.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	192.9
Baldonnel A	.....	135.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	135.0
Belloy A	.....	558.0	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	558.0
Totals	.....	885.9	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	885.9
Osprey—													
Bluesky A	1 332.5	1 218.2	509.7	153.6	516.2	98.0	190.7	122.5	506.9	1 179.1	.....	391.0	6 218.4
Gething A	786.8	723.1	331.7	278.5	150.0	.....	227.8	579.8	362.4	79.8	.....	322.8	3 842.7
Halfway A[1]	271.1	164.6	248.6	272.1	219.8	676.7	658.5	327.0	420.4	683.2	119.4	224.6	4 286.0
Totals	2 390.4	2 105.9	1 090.0	704.2	886.0	774.7	1 077.0	1 029.3	1 289.7	1 942.1	119.4	938.4	14 347.1
Paradise—Halfway A	.....	.....	.....	.....	.....	519.2	564.3	290.3	261.7	255.7	179.3	119.2	2 189.7
Parkland—Wabamun A	6 398.2	7 067.4	2 988.9	2 843.0	7 375.4	8 855.0	8 568.0	8 413.9	8 302.9	4 917.1	1 004.6	5 758.0	72 492.4
Peejay—													
Gething A	750.9	754.2	837.0	819.4	846.9	798.0	811.7	868.4	300.7	561.1	814.7	860.9	9 023.9
Baldonnel A	963.8	968.2	1 044.1	1 004.5	989.2	1 064.6	1 085.8	1 068.1	269.5	609.4	941.1	1 060.0	11 068.3
Halfway	922.8	991.2	1 085.2	1 015.1	956.9	1 022.1	1 078.0	1 042.4	211.4	566.2	924.8	1 062.1	10 878.2
Halfway[1]	859.0	848.5	1 109.2	966.2	1 072.7	799.3	949.2	1 000.6	843.3	854.8	1 036.5	972.4	11 311.7
Halfway A[1]	29.7	26.1	38.4	44.6	40.3	13.8	32.5	17.6	16.3	13.7	29.7	18.4	321.1
Halfway K	129.3	143.7	156.9	161.0	177.4	163.1	192.6	143.7	73.4	127.7	202.0	203.4	1 874.2
Halfway L[1]	263.2	39.4	238.1	372.6	283.2	325.2	297.7	280.6	118.5	420.9	273.2	626.7	3 539.3
Halfway M	1 027.1	1 124.8	673.6	706.1	463.7	750.7	458.6	658.4	224.7	80.6	1 001.2	1 177.8	8 347.3
Totals	4 945.8	4 896.1	5 182.5	5 089.5	4 830.3	4 936.8	4 906.1	5 079.8	2 057.8	3 234.4	5 223.2	5 981.7	56 364.0
Peejay West—Halfway A[1]	1 737.0	1 532.5	1 520.8	1 714.0	857.8	800.5	1 534.4	1 776.5	393.9	1 266.5	1 584.0	1 475.1	16 193.0
Petitot River—Slave Point A	3 906.3	3 481.8	2 282.1	1 773.6	740.4	.....	.....	.....	.....	.....	1 778.6	3 209.8	17 172.6

Pickell—													
Bluesky A		156.7	72.2	79.4								21.2	329.5
Halfway A					20.0							1 326.0	1 346.0
Totals		156.7	72.2	79.4	20.0							1 347.2	1 675.5
Red Creek—Halfway A	124.6												124.6
Rigel—													
Bluesky A	289.7	137.5		150.5	240.2			257.3	37.0	203.4	7.7	208.1	1 531.4
Gething A	289.2							194.1	428.6	528.1	583.7	74.3	2 098.0
Dunlevy A[1]	784.1	693.6	370.8	510.8	404.6	454.0	535.4	672.7	417.4	561.6	565.2	524.3	6 494.5
Dunlevy B[1]	390.6	383.3	166.0	170.8	4.0								1 114.7
Dunlevy E[1]	95.1	27.3	58.3	42.7	98.1	130.3	116.4	79.6	58.1	66.2	79.1	74.9	926.1
Dunlevy F	31 128.3	18 958.1	4 477.0	18 421.0	23 431.9	15 826.6	17 530.8	24 468.0	19 069.2	24 136.2	19 649.1	17 931.5	235 027.7
Dunlevy I[1]				315.4									315.4
Totals	32 977.0	20 199.8	5 072.1	19 611.2	24 178.8	16 410.9	18 182.6	25 671.7	20 010.3	25 495.5	20 884.8	18 813.1	247 507.8
Rigel East—Gething A	2 088.1	2 397.6	1 969.9	706.6	939.6	929.3	722.7	1 027.3	1 859.5	1 963.3	2 482.6	3 646.0	20 732.5
Ring—													
Gething E			32.3										32.3
Gething F			28.2										28.2
Totals			60.5										60.5
Roger—Pine Point A	22 898.6	12 559.2	5 720.9	6 812.1	7 814.6	6 641.3	2 038.6		17 104.5	25 613.0	25 796.3	21 098.7	154 097.8
Sahtaneh—													
Pine Point A	2 544.6	359.2	706.8								769.2	15 333.3	19 713.1
Pine Point B	1 063.5	2 548.1	3 696.7	3 661.2						1 517.8	16 335.4	15 859.6	44 682.3
Totals	3 608.1	2 907.3	4 403.5	3 661.2						1 517.8	17 104.6	31 192.9	64 395.4
Septimus—North Pine A[1]		19.9	17.5	18.8								17.2	73.4
Sierra—													
Pine Point A	16 610.9	30 692.7	26 858.7	20 769.2	36 388.7	8 246.8	6 609.7		19 295.3	50 104.2	50 492.1	76 378.7	342 447.0
Pine Point B	27 584.0	27 458.0	21 705.3	26 657.4	24 004.5	17 095.1			17 223.0	33 862.9	23 078.7	26 099.5	244 768.4
Pine Point C	22 379.0	10 176.4	9 673.6	6 071.0	18 968.5	12 046.8			11 167.4	24 719.1	22 978.0	13 094.4	151 274.2
Pine Point D	15.7	4 724.8	6 482.6	876.2							2 409.0	17 074.0	31 582.3
Totals	66 589.6	73 051.9	64 720.2	54 373.8	79 361.7	37 388.7	6 609.7		47 685.7	108 686.2	98 957.8	132 646.6	770 071.9
Silver—													
Bluesky A	17 020.3	9 538.6	7 126.6	7 386.5	4 669.0	3 161.0	6 573.7	9 066.4	6 936.8	10 028.4	7 114.8	6 869.9	95 492.0
Bluesky B	1 094.3	519.7	458.1	48.5				259.6	445.8	377.7		391.3	3 595.0
Halfway B						237.6	224.9	331.6	69.6	769.5	1 032.3	544.1	3 209.6
Totals	18 114.6	10 058.3	7 584.7	7 435.0	4 669.0	3 398.6	6 798.6	9 657.6	7 452.2	11 175.6	8 147.1	7 805.3	102 296.6
Silverberry—North Pine A	635.3	985.9	615.7	1 157.7	880.3	759.3	764.0	780.2	862.4	58.4	903.7	980.0	9 382.9
Siphon—													
Dunlevy A	3 600.3	6 083.8	2 834.5					2 424.8	2 067.8	3 568.9	47.7	7 304.1	27 931.9
Baldonnel A	147.3	198.1	275.5	132.8	144.0	151.5	88.9	147.0	42.0	153.9	139.3	148.5	1 768.8
Siphon A	1 120.6	1 158.7	647.4	199.9	298.1	1.4	147.0	1 715.5	598.2	1 044.8	311.6	1 996.1	9 239.3
Halfway A	2 218.8	2 524.5	1 163.2					1 569.9	1 003.2	1 859.6	20.6	3 149.2	13 509.0
Totals	7 087.0	9 965.1	4 920.6	332.7	442.1	152.9	235.9	5 857.2	3 711.2	6 627.2	519.2	12 597.9	52 449.0
Siphon East—													
Bluesky A	5 869.1	5 844.0	3 124.4	1 107.0		2 178.7	1 422.3	1 083.0	843.5	2 465.5	4 812.8	5 664.9	34 415.2
Baldonnel A	8.8	12.7	7.5	7.4			6.3	1.8		3.5	6.4	13.9	68.3
Totals	5 877.9	5 856.7	3 131.9	1 114.4		2 178.7	1 428.6	1 084.8	843.5	2 469.0	4 819.2	5 678.8	34 483.5

[1] Associated gas.

Table P8—Monthly Non-associated and Associated Gas Production by Fields and Pools—Continued

(Volumes in 10^3m^3 at 101.325 kPa and 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Squirrel—North Pine A[1]	99.6	81.2	82.6	69.7	58.9	80.0	80.5	53.1	20.4	15.1	20.5	27.6	689.2
Stoddart—													
Cecil A[1]	63.3	51.6	34.2	.....	.....	29.9	24.2	24.8	55.1	42.9	41.4	107.8	475.2
Cecil B[1]	34.0	35.9	24.6	9.0	1.6	.....	10.1	44.8	45.3	21.1	42.9	42.8	312.1
Cecil C[1]	.....	.....	.....	.....	.....	.....	.....	25.2	42.7	21.2	46.6	153.9	289.6
North Pine B	.....	3.8	133.2	3.7	91.3	.....	.....	.....	.....	.....	.....	.....	232.0
Belloy A	25 979.5	19 522.0	5 416.7	10 653.4	14 284.7	15 173.4	20 158.4	17 955.0	8 386.1	6 764.2	8 192.9	28 276.2	180 762.5
Belloy C[1]	21.4	9.1	6.0	4.3	.....	7.7	69.0	85.1	110.9	63.1	14.2	70.1	460.9
Totals	26 098.2	19 622.4	5 614.7	10 670.4	14 377.6	15 211.0	20 261.7	18 134.9	8 640.1	6 912.5	8 338.0	28 650.8	182 532.3
Stoddart South—													
Belloy A[1]	167.6	357.9	313.3	13.2	.....	21.9	30.5	94.6	186.7	255.0	187.5	300.2	1 928.4
Belloy C[1]	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	80.8	272.1	352.9
Totals	167.6	357.9	313.3	13.2	.....	21.9	30.5	94.6	186.7	255.0	268.3	572.3	2 281.3
Stoddart West—													
Cecil B[1]	.....	.....	39.1	.....	.....	.....	.....	.....	187.7	39.0	.....	.....	265.8
North Pine A[1]	149.8	.....	.....	.....	.....	229.4	202.1	212.5	166.4	192.0	276.7	264.9	1 693.8
Doig B[1]	.....	.....	.....	10.7	21.8	26.7	34.0	53.4	34.7	31.0	32.2	47.4	291.9
Belloy A	5 905.4	3 723.2	715.1	1 927.0	5 496.6	2 487.0	3 975.7	3 495.1	1 054.5	748.1	3 336.2	5 332.8	38 196.7
Belloy C[1]	712.5	619.1	557.2	594.2	533.7	560.7	701.8	814.7	510.2	500.4	789.0	933.7	7 827.2
Belloy D	60.1	52.2	85.2	69.5	73.8	.....	.....	.....	23.5	10.2	.....	5.5	380.0
Totals	6 827.8	4 394.5	1 396.6	2 601.4	6 125.9	3 303.8	4 913.6	4 575.7	1 977.0	1 520.7	4 434.1	6 584.3	48 655.4
Sukunka—													
Baldonnel A	33 050.5	26 043.4	45 099.0	27 530.8	34 062.8	.....	4 894.4	167.8	27 301.5	46 692.0	20 140.9	30 003.2	294 986.3
Baldonnel B	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 202.9	.....	2 202.9
Baldonnel C	.....	.....	.....	.....	.....	.....	.....	.....	.....	2 302.8	6 265.4	30.0	8 598.2
Totals	33 050.5	26 043.4	45 099.0	27 530.8	34 062.8	.....	4 894.4	167.8	27 301.5	48 994.8	28 609.2	30 033.2	305 787.4
Sunrise—Cadotte A	464.5	419.4	397.6	338.6	418.0	27.8	340.3	384.0	331.2	357.6	223.0	231.7	3 933.7
Town—													
Baldonnel A	907.4	1 073.2	503.2	527.2	505.1	514.4	603.8	586.5	592.0	883.8	812.6	292.3	7 801.5
Halfway A	1 499.3	1 737.2	881.6	970.4	992.1	1 056.9	508.0	1 331.2	1 517.4	1 228.9	854.8	339.7	12 917.5
Totals	2 406.7	2 810.4	1 384.8	1 497.6	1 497.2	1 571.3	1 111.8	1 917.7	2 109.4	2 112.7	1 667.4	632.0	20 719.0
Townsend—Debolt A	743.1	565.5	252.8	583.2	554.6	152.4	319.1	64.2	.....	462.8	270.1	307.5	4 275.3
Tsea—													
Slave Point A	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	1 436.4	681.0	2 177.4
Slave Point B	2 866.4	1 692.0	3 144.3	2 116.3	2 145.4	2 135.0	980.9	.....	.....	.....	99.7	2 866.9	18 046.9
Totals	2 866.4	1 692.0	3 144.3	2 116.3	2 145.4	2 135.0	980.9	.....	.....	.....	1 536.1	3 547.9	20 164.3
Two Rivers—													
Baldonnel A	.....	210.2	104.3	.....	.....	.....	.....	233.2	265.4	.....	.....	.....	813.1
Halfway A	1 434.7	1 821.8	631.1	1 570.7	835.2	918.0	1 472.3	1 462.8	1 586.6	2 251.1	1 029.1	447.3	15 460.7
Halfway B[1]	138.4	127.7	117.8	72.5	.....	77.9	112.9	89.1	.....	85.7	85.7	151.3	1 059.0
Totals	1 573.1	2 159.7	853.2	1 643.2	835.2	995.9	1 585.2	1 785.1	1 852.0	2 338.6	1 114.8	598.6	17 332.8

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Velma—													
Gething A	8 263.9	5 432.0	3 241.4	2 759.4	3 494.5	2 458.7	4 196.6	7 755.6	5 361.0	6 323.1	7 165.4	4 454.6	60 906.2
"A" Marker A	1 709.8	1 161.1	849.8	1 325.5	1 416.5	671.8	1 191.0	2 786.0	1 413.3	1 749.8	1 037.6	950.3	16 262.5
Totals	9 973.7	6 593.1	4 091.2	4 084.9	4 911.0	3 130.5	5 387.6	10 541.6	6 774.3	8 072.9	8 203.0	5 404.9	77 168.7
Weasel—													
Baldonnel A	86.6	77.1	74.5	55.4	42.7	39.5	43.7	46.6	10.0	7.8	31.6	21.0	536.5
Halfway [1]	513.5	376.4	527.8	395.4	436.9	220.5	413.9	371.0	236.4	285.9	245.6	421.4	4 444.7
Halfway B[1]	73.2	108.0	112.9	114.0	23.2	131.3	118.0	124.0	28.0	38.7	89.8	2.4	963.5
Totals	673.3	561.5	715.2	564.8	502.8	391.3	575.6	541.6	274.4	332.4	367.0	444.8	5 944.7
Weasel West—													
Halfway A[1]	58.2	57.4	58.7	51.2	35.7	38.7	65.8	59.3	47.3	60.6	40.3	49.8	623.0
Halfway B[1]	6.6	6.3	12.7	3.7	6.8	2.6	3.6	4.9	5.3	7.3	0.9	9.9	70.6
Totals	64.8	63.7	71.4	54.9	42.5	41.3	69.4	64.2	52.6	67.9	41.2	59.7	693.6
Wilder—Halfway A	7 857.2	8 384.3	4 756.5	2 311.6	3 570.5	4 635.4	5 377.3	4 587.2	2 296.4	2 546.7	818.8	2 613.5	49 755.4
Wildmint—													
Bluesky A	173.4	164.2	165.0	173.5	169.6	145.6	151.9	158.6	161.6	180.5	175.3	176.4	1 995.6
Upper Halfway A[1]	592.6	562.5	475.8	765.9	961.3	454.7	426.7	524.3	427.0	302.9	462.5	461.1	6 417.3
Halfway A	3.6	13.4	6.6	10.7	3.1	1.5	18.8	66.9	23.0	74.2	23.1	112.2	357.1
Halfway A[1]	317.1	282.2	336.0	347.0	339.8	268.3	302.5	243.8	269.5	.....	251.6	304.2	3 262.0
Totals	1 086.7	1 022.3	983.4	1 297.1	1 473.8	870.1	899.9	993.6	881.1	557.6	912.5	1 053.9	12 032.0
Willow—													
Gething A[1]	185.0	234.9	164.7	176.0	203.8	178.9	190.3	168.5	129.7	119.5	139.3	104.6	1 995.2
Halfway A	1 433.6	1 276.3	708.0	495.9	.....	.....	.....	.....	478.3	1 272.0	1 084.3	1 417.0	8 165.4
Halfway B	2 210.3	2 916.5	1 505.7	769.3	611.6	1 376.2	756.4	1 030.7	853.3	111.7	.....	2 336.5	14 478.2
Totals	3 828.9	4 427.7	2 378.4	1 441.2	815.4	1 555.1	946.7	1 199.2	1 461.3	1 503.2	1 223.6	3 858.1	24 638.8
Wolf—Halfway A[1]	142.1	157.0	196.5	182.7	165.0	154.0	107.9	165.0	84.4	82.6	138.5	135.7	1 711.4
Woodrush—Halfway A	1 850.7	2 002.7	3 159.2	553.4	862.8	981.5	746.6	858.7	1 158.0	1 294.8	3 160.0	836.7	17 465.1
Yoyo—													
Pine Point A	138 702.0	183 494.4	128 374.4	67 362.2	77 546.9	67 143.1	25 080.6	.....	68 057.8	82 735.9	150 216.5	178 151.3	1 166 865.1
Pine Point B	10 820.9	5 057.4	7 306.7	681.3	.....	.....	.....	.....	.....	.....	7 966.2	8 118.4	39 950.9
Totals	149 522.9	188 551.8	135 681.1	68 043.5	77 546.9	67 143.1	25 080.6	.....	68 057.8	82 735.9	158 182.7	186 269.7	1 206 816.0
Other Areas—													
Debolt	234.1	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	234.1
Jean Marie	.....	211.4	372.5	.....	.....	.....	.....	.....	.....	.....	.....	.....	583.9
Slave Point	5 006.0	4 107.0	3 964.3	4 101.0	3 700.3	1 524.3	.....	.....	.....	3 497.3	8 888.7	9 891.9	44 680.8
Sulphur Point	632.6	690.3	384.9	93.5	.....	.....	.....	.....	12.7	.....	1 171.5	1 126.7	4 112.2
Confidential	.....	130.9	323.8	.....	.....	.....	.....	.....	.....	.....	.....	.....	454.7
Confidential[1]	.....	.....	.....	.....	.....	.....	6.4	45.8	33.0	37.3	20.4	44.2	187.1
Totals	5 872.7	5 139.6	5 045.5	4 194.5	3 700.3	1 524.3	6.4	45.8	45.7	3 534.6	10 080.6	11 062.8	50 252.8
Totals—													
Non-associated Gas	1 003 354.1	960 755.4	703 092.0	568 317.5	602 246.3	454 503.9	333 884.4	348 709.1	566 350.0	717 653.0	776 968.1	938 932.0	7 974 765.8
Associated Gas	40 299.7	39 623.0	43 153.2	44 120.8	40 390.1	38 218.9	41 870.3	39 448.4	32 336.6	35 613.0	38 220.3	41 588.4	474 882.7
Totals	1 043 653.8	1 000 378.4	746 245.2	612 438.3	642 636.4	492 722.8	375 754.7	388 157.5	598 686.6	753 266.0	815 188.4	980 520.4	8 449 648.5

[1] Associated gas.

Table P9—Monthly Supply and Disposition of Crude Oil/Pentanes Plus, 1981

(Volumes in m^3 at 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Supply													
British Columbia production—													
Crude oil	178 266.9	160 902.8	184 192.9	170 047.2	167 752.9	155 254.3	173 550.9	179 743.7	156 392.1	146 785.4	175 375.5	182 328.9	2 035 952.5
Field condensate	3 020.5	2 679.5	2 086.4	1 505.6	1 753.0	1 684.0	2 513.3	2 505.0	2 226.3	2 387.7	2 456.7	2 749.0	27 871.4
Plant condensate	15 163.3	12 704.3	7 230.0	9 076.2	10 539.5	8 839.8	10 548.0	11 779.9	9 926.4	10 310.0	7 237.6	11 591.2	124 946.2
Totals British Columbia	196 450.7	176 286.6	193 509.3	180 629.0	180 045.4	165 778.1	186 612.2	194 028.6	168 544.8	159 483.1	185 069.8	196 669.1	2 188 770.1
Alberta imports—													
Pipeline	815 849.7	723 580.2	713 953.6	710 758.5	676 215.3	720 500.8	693 218.5	700 114.6	687 666.1	613 194.5	716 441.9	788 729.8	8 560 323.5
Rail	6 842.1	6 666.1	5 238.6	5 721.2	4 140.0	4 605.6	3 875.3	4 047.4	3 647.4	5 585.5	5 083.2	5 927.5	61 279.9
Totals Alberta	822 691.8	730 246.3	719 192.2	716 479.7	680 355.3	725 106.4	697 093.8	704 162.0	691 313.5	618 780.0	721 525.1	794 657.3	8 621 603.4
Total supply	1 019 142.5	906 532.9	912 701.5	897 108.7	860 400.7	890 884.5	883 706.0	898 190.6	859 858.3	778 263.1	906 594.9	991 326.4	10 810 373.5
Disposition													
Inventory changes—													
Field	−1 781.7	670.6	−1 131.6	409.8	3 273.6	−3 441.6	6 124.1	−5 888.1	−1 672.8	1 824.2	−1 231.6	827.0	−1 689.4
Plant	−1 390.2	−492.2	−3 797.9	734.6	−53.0	556.8	62.3	27.1	112.1	−164.2	−964.3	−366.6	−5 735.5
Transporters	26 930.0	12 319.8	−33 162.1	−2 142.6	19 213.3	3 652.3	−7 844.6	21 937.4	10 661.4	−13 342.2	16 625.8	4 210.5	59 059.0
Totals	23 758.1	12 498.2	−38 091.6	−998.2	22 433.9	767.5	−1 658.2	16 076.4	9 100.7	−11 682.2	14 429.9	4 670.9	51 634.1
Losses and adjustments—													
Field	−438.5	−399.9	−660.0	−286.5	−257.9	273.7	−738.4	−1 003.0	−1 029.0	−343.5	262.2	−207.6	−4 197.9
Plant	17.2	18.3	7.9	17.5	.....	.....	−1 099.0	−596.0	−721.0	−1 115.4	855.0	122.7	−2 492.8
Transporters	−135.5	−2 016.9	1 232.4	79.9	−1 043.2	1 453.9	−3 075.8	−523.7	1 621.4	−2 655.2	−489.0	−489.8	−6 041.5
Totals	−556.8	−2 398.5	580.3	−189.1	−1 301.1	1 727.6	−4 913.2	−2 122.7	−128.6	−4 114.1	628.2	−574.7	−12 732.2
Transfers	8 934.1	9 158.9	6 128.2	4 457.2	8 030.0	4 673.9	6 121.3	7 505.4	9 183.1	9 795.0	1 590.7	1 590.3	77 168.1
Deliveries													
To British Columbia refineries—													
British Columbia production	202 047.8	154 586.4	211 057.3	204 836.3	168 085.6	197 068.2	183 190.6	205 436.3	171 673.3	185 959.0	206 110.6	188 491.7	2 278 543.1
Alberta production	689 553.5	631 463.0	621 960.8	595 676.9	564 067.3	611 754.3	592 702.6	577 379.3	578 942.0	512 067.4	589 271.1	676 175.1	7 241 013.3
Totals	891 601.3	786 049.4	833 018.1	800 513.2	732 152.9	808 822.5	775 893.2	782 815.6	750 615.3	698 026.4	795 381.7	864 666.8	9 519 556.4
To export—													
British Columbia production	5 754.2	3 512.2	4 661.8	1 164.6	2 771.8	2 958.4	.....	3 517.3	5 055.4	1 543.3	2 516.7	2 337.2	35 792.9
Alberta production	85 574.5	96 614.6	102 864.0	91 303.0	96 445.4	76 337.9	108 344.8	89 970.1	85 416.9	91 297.0	89 510.0	110 543.7	1 124 221.9
Totals	91 328.7	100 126.8	107 525.8	92 467.6	99 217.2	79 296.3	108 344.8	93 487.4	90 472.3	92 840.3	92 026.7	112 880.9	1 160 014.8
Reporting adjustment	4 077.1	1 098.1	3 540.7	858.0	−132.2	−4 403.3	−81.9	428.5	615.5	−6 602.3	2 537.7	8 092.2	14 732.3
Total disposition	1 019 142.5	906 532.9	912 701.5	897 108.7	860 400.7	890 884.5	883 706.0	898 190.6	859 858.3	778 263.1	906 594.9	991 326.4	10 810 373.5
British Columbia Refineries													
Receipts—													
British Columbia crude	234 940.2	205 696.8	291 311.6	266 199.4	238 418.2	285 873.4	258 566.1	297 803.3	273 933.4	281 005.3	282 756.9	226 178.8	3 142 683.4
British Columbia condensate	8 934.1	9 149.6	6 115.6	4 416.9	5 383.0	6 915.0	6 492.0	4 983.0	4 546.0	8 812.0	7 126.0	8 196.0	81 069.2
Totals	243 874.3	214 846.4	297 427.2	270 616.3	243 801.2	292 788.4	265 058.1	302 786.3	278 479.4	289 817.3	289 882.9	234 374.8	3 223 752.6
Alberta crude	639 289.0	578 835.5	551 225.9	550 612.7	555 949.6	522 307.3	512 196.2	523 245.4	504 408.7	446 093.9	503 738.6	605 435.1	6 493 337.9
Alberta condensate	65 414.0	66 616.0	80 362.0	55 288.0	30 880.0	67 092.0	63 409.0	63 973.0	88 200.0	55 267.0	64 281.0	72 540.0	773 322.0
Totals	704 703.0	645 451.5	631 587.9	605 900.7	586 829.6	589 399.3	575 605.2	587 218.4	592 608.7	501 360.9	568 019.6	677 975.1	7 266 659.9
Total receipts	948 577.3	860 297.9	929 015.1	876 517.0	830 630.8	882 187.7	840 663.3	890 004 7	871 088.1	791 178.2	857 902.5	912 349.9	10 490 412.5

Disposition													
Inventory changes	−3 492.7	20 433.8	9 386.2	21 198.7	−9 009.0	11 533.1	−12 371.9	−2 992.7	40 822.3	−44 790.1	−2 902.1	7 908.4	35 724.0
Losses and adjustments	41 975.0	51 121.0	65 131.0	63 130.0	64 675.0	63 155.0	57 018.0	62 521.0	94 020.0	67 011.0	54 132.0	40 146.0	724 035.0
Refinery run—													
British Columbia production	201 665.7	155 760.2	218 147.9	190 504.2	185 657.1	223 050.1	216 317.5	220 106.0	176 697.6	245 094.4	245 916.6	235 089.3	2 514 006.6
Alberta production	708 429.3	632 982.9	636 350.0	601 684.1	589 307.7	584 449.5	579 699.7	610 370.4	559 548.2	523 862.9	560 756.0	629 206.2	7 216 646.9
Totals	910 095.0	788 743.1	854 497.9	792 188.3	774 964.8	807 499.6	796 017.2	830 476.4	736 245.8	768 957.3	806 672.6	864 295.5	9 730 653.5
Total disposition	948 577.3	860 297.9	929.015.1	876 517.0	830 630.8	882 187.7	840 663.3	890 004.7	871 088.1	791 178.2	857 902.5	912 349.9	10 490 412.5

Table P10—Monthly Supply and Disposition of Natural Gas, 1981

(Volumes in 10^3m^3 at 101.325 kPa 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Supply													
British Columbia production—													
Non-associated gas	1 003 719.3	959 538.1	704 208.3	565 584.3	593 072.2	456 121.8	326 239.7	352 013.0	564 136.5	717 224.4	782 206.4	940 445.8	7 992 233.2
Associated gas	40 749.7	39 434.7	38 374.4	4[illegible] 072.7	40 115.0	34 748.5	41 229.7	35 413.9	33 999.8	35 085.0	33 708.8	40 064.8	457 923.7
Less injected	−2 726.9	−2 645.7	−2 967.6	−2 813.1	−2 921.3	−2 718.2	−2 804.9	−2 407.7	−2 865.7	−2 765.8	−1 831.1	−2 065.7	−31 533.7
Net British Columbia production	1 041 742.1	996 327.1	739 615.1	606 843.9	630 265.9	488 152.1	364 664.5	385 019.2	595 270.6	749 543.6	814 084.1	978 444.9	8 418 623.2
Imports to northeastern British Columbia—													
Alberta	84 587.5	94 271.4	118 754.6	78 676.5	81 606.5	87 275.7	100 278.3	103 899.6	53 654.4	38 217.1	78 246.0	82 757.3	1 002 224.9
Northwest Territories	36 721.3	37 960.3	41 810.4	38 041.9	33 227.2	34 166.6	19 119.1	.....	24 712.9	33 995.1	24 953.1	21 618.9	346 326.8
Total imports	121 308.8	132 231.7	160 565.0	116 718.4	114 833.7	121 442.3	119 397.4	103 899.6	78 367.3	72 212.2	103 199.1	104 376.2	1 348 551.7
Total supply	1 163 050.9	1 128 558.8	900 180.1	723 562 3	745 099.6	609 594.4	484 061.9	488 918.8	673 637.9	821 755.8	917 283.2	1 082 821.1	9 767 174.9
Disposition													
Flared—													
Field	7 574.3	7 675.4	7 972.7	5 767.8	5 395.1	6 560.4	6 108.6	11 347.6	7 673.0	7 479.2	9 332.2	8 296.2	93 722.4
Gathering systems	369.8	216.9	796.5	90.6	80.5	104.6	9.0	4.3	258.6	78.2	123.1	339.6	2 471.7
Plant	495.8	2 049.6	185.0	214.6	785.2	601.5	472.4	1 208.2	2 526.8	1 876.5	1 321.0	1 010.4	12 747.0
Total	8 439.9	9 941.9	8 954.2	6 073.0	6 260.8	7 266.5	6 590.0	12 560.1	10 458.4	9 433.9	10 776.3	9 646.2	108 991.1
Fuel—													
Field	13 123.9	11 122.3	10 841.6	11 115.3	10 543.5	5 525.3	5 997.4	6 673.7	6 207.2	8 012.9	7 440.9	9 330.7	106 877.4
Compressor	12 073.2	683.9	405.8	605.9	190.9	282.2	274.0	372.4	401.8	592.9	664.2	793.2	17 340.4
Plant	44 285.8	44 688.4	42 724.4	37 412.1	34 828.6	29 857.6	22 611.5	13 255.8	27 775.5	39 486.3	40 847.5	42 976.8	420 750.3
Total	69 482.9	56 494.6	53 971.8	49 133.3	45 563.0	35 665.1	28 882.9	20 301.9	34 384.5	48 092.1	48 952.6	53 100.7	544 968.1
Losses and adjustments—													
Field	19 495.2	33 139.0	30 909.5	15 688.2	9 778.5	−2 863.5	6 484.9	2 146.6	−771.1	18 343.4	34 832.3	27 795.2	195 550.3
Plant	7 627.2	3 110.2	4 775.8	8 734.9	5 610.0	1 029.3	5 065.9	12 302.5	5 607.0	5 323.5	5 697.1	5 071.3	69 954.7
Total	27 122.4	36 249.2	35 685.3	24 423.1	15 388.5	−1 834.2	11 550.8	14 449.1	4 835.9	23 666.9	40 529.4	32 866.5	265 505.0
Line pack	−278.3	156.0	239.7	−401.2	−148.0	−135.8	26.3	−17.5	841.6	−2.2	616.3	117.9	1 014.8
Processing shrinkage	92 056.2	105 859.9	92 751.5	64 888.3	68 022.7	46 626.0	24 612.5	17 014.2	58 494.7	82 393.5	90 685.6	108 647.9	852 053.0
Reporting adjustment	−1 437.6	−4 900.4	−14 842.6	−8 329.9	−10 214.6	−9 717.3	−5 992.6	−2 331.2	−1 681.0	−12 660.2	−9 993.9	−10 481.8	−68 037.7
Available marketable gas in northeastern British Columbia	967 665.4	924 757.6	723 420.2	587 775.7	620 227.2	531 724.1	418 392.0	426 942.2	566 303.8	670 831.8	735 716.9	888 923.7	8 062 680.6
Total disposition	1 163 050.9	1 128 558.8	900 180.1	723 562.3	745 099.6	609 594.4	484 061.9	488 918.8	673 637.9	821 755.8	917 283.2	1 082 821.1	9 767 174.9

British Columbia transporters													
Supply													
Available marketable gas in northeastern British Columbia	967 665.4	924 757.6	723 420.2	587 775.7	620 227.2	531 724.1	418 392.0	426 942.2	566 303.8	670 831.8	735 716.9	888 923.7	8 062 680.6
Imports to southeastern British Columbia													
Alberta	866 472.5	780 867.7	871 214.3	728 900.3	548 364.4	696 350.9	689 703.3	665 414.0	673 672.0	802 289.9	795 940.2	868 982.1	8 988 171.6
Total supply	1 834 137.9	1 705 625.3	1 594 634.5	1 316 676.0	1 168 591.6	1 228 075.0	1 108 095.3	1 092 356.2	1 239 975.8	1 473 121.7	1 531 657.1	1 757 905.8	17 050 852.2
Disposition													
Fuel	32 304.6	35 281.6	17 874.4	11 733.3	16 878.3	12 030.6	11 395.4	13 081.8	13 618.7	16 793.6	19 292.9	24 699.3	224 984.5
Losses and adjustments	3 949.3	−732.3	8 778.9	6 830.6	6 709.4	2 191.6	12 662.9	8 060.8	10 389.7	10 522.5	10 525.0	5 726.4	85 614.8
Line pack changes	−3 727.0	7 180.3	−5 981.1	3 811.8	−5 806.8	516.8	−4 093.0	3 286.5	1 829.1	5 969.9	−1 426.4	3 940.5	5 500.6
Deliveries to British Columbia distributors—													
North	14 130.9	13 975.4	11 820.9	10 541.3	5 798.0	4 834.4	3 623.7	3 031.3	5 247.3	9 262.5	12 434.3	17 330.5	112 030.5
Interior	208 489.1	189 152.6	195 168.9	166 930.1	137 193.4	124 314.0	75 488.6	53 413.6	115 330.5	155 522.4	177 351.0	209 116.8	1 807 471.0
Lower Mainland	268 146.2	252 024.1	227 504.1	215 874.6	166 280.5	144 790.0	106 351.9	93 935.7	131 159.9	228 802.6	255 332.3	318 028.1	2 408 230.0
Total	490 766.2	455 152.1	434 493.9	393 346.0	309 271.9	273 938.4	185 464.2	150 380.6	251 737.7	393 587.5	445 117.6	544 475.4	4 327 731.5
Deliveries to export—													
From northeastern British Columbia	481 286.1	458 024.5	302 609.8	201 576.7	324 810.8	264 018.0	237 428.3	274 262.7	319 974.5	283 979.2	302 315.0	354 773.4	3 805 059.0
From southeastern British Columbia	830 484.2	747 659.1	835 551.5	697 761.2	517 968.5	670 446.1	667 249.5	644 000.1	645 985.0	764 065.6	760 444.9	828 245.7	8 609 861.4
Total	1 311 770.3	1 205 683.6	1 138 161.3	899 337.9	842 779.3	934 464.1	904 677.8	918 262.8	965 959.5	1 048 044.8	1 062 759.9	1 183 019.1	12 414 920.4
Reporting adjustment	−925.5	3 060.0	1 307.1	1 616.4	−1 240.5	4 933.5	−2 012.0	−716.3	−3 558.9	−1 796.6	−4 611.9	−3 954.9	−7 899.6
Total disposition	1 834 137.9	1 705 625.3	1 594 634.5	1 316 676.0	1 168 591.6	1 228 075.0	1 108 095.3	1 092 356.2	1 239 975.8	1 473 121.7	1 531 657.1	1 757 905.8	17 050 852.2
British Columbia Distributors													
Receipts													
Natural and L.P. gas—													
From transporters	499 958.6	469 815.8	433 334.2	391 511.2	320 398.6	277 312.2	189 459.1	160 041.6	255 317.8	399 500.6	452 249.9	557 281.7	4 406 181.3
From storage	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Other receipts	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total supply	499 958.6	469 815.8	433 334.2	391 511.2	320 398.6	277 312 2	189 459.1	160 041.6	255 317.8	399 500.6	452 249.9	557 281.7	4 406 181.3
Disposition													
Fuel	1 326.8	1 471.0	1 488.7	1 041.1	982.8	1 323.4	336.3	298 7	500.8	735.0	1 855.9	1 458.5	12 819.0
Losses and adjustments	10 972.9	7 605.3	−6 085.7	−9 530.0	−23 556.7	−11 157.2	−16 761.9	−7 538.5	72 954.2	41 186.5	77 697.3	98 491.6	234 277.8
Line pack changes	2 694.9	−310.4	−41.8	−200.9	139.3	−43.1	130.4	275.0	−129.2	61.2	362.3	−2.5	2 935.2
To storage	.....	.....	605.3	2 855.6	2 790.9	3 341.8	.....	.....	.....	2 207.1	754.9	.....	12 555.6
Sales—													
Residential	164 371.4	160 359.5	136 050.1	122 726.7	97 708.4	69 103.7	50 494.7	41 088.3	36 798.4	64 890.1	97 342.2	138 373.8	1 179 307.3
Commercial	152 874.6	143 924.5	129 114.0	117 324.7	96 770.0	70 393.8	56 797.8	42 820.4	51 116.5	72 980.6	103 419.2	137 525.8	1 175 061.9
Industrial	165 285.4	154 788.2	169 942.5	155 457.0	144 202.9	143 070.3	97 178.6	82 137.7	92 790.7	208 844.3	168 877.2	179 123.8	1 761 698.6
Electric power	2 432.6	1 977.7	2 261.1	1 837.0	1 361.0	1 279.5	1 283.2	960.0	1 286.4	8 595.8	1 940.9	2 310.7	27 525.9
Total	484 964.0	461 049.9	437 367.7	397 345.4	340 042.3	283 847.3	205 754.3	167 006.4	181 992.0	355 310.8	371 579.5	457 334.1	4 143 593.7
Total disposition	499 958.6	469 815.8	433 334.2	391 511.2	320 398.6	277 312.2	189 459.1	160 041.6	255 317.8	399 500.6	452 249.9	557 281.7	4 406 181.3
Revenue (in dollars)	41 472 555.	39 409 026.	37 017 396.	33 259 663.	30 238 542.	25 607 401.	20 827 832.	20 255 438.	22 362 663.	41 029 451.	44 496 982.	55 475 785.	411 452 734.

Table P11—Monthly Supply and Disposition of Propane, 1981

(Volumes in m^3 at 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Supply													
British Columbia production													
Plant	5 757.2	3 633.9	4 432.8	4 566.6	5 011.9	3 827.6	5 088.5	5 286.3	4 884.7	7 807.0	6 967.4	6 829.8	64 118.2
Refinery	11 210.2	9 185.2	10 878.7	10 269.0	7 167.3	8 840.9	8 964.8	9 514.1	9 695.2	8 365.8	10 196.9	11 255.0	115 543.1
Total	16 967.4	12 819.1	15 311.5	14 835.6	12 179.2	12 668.5	14 053.3	14 800.4	14 579.9	16 172.8	17 164.3	18 084.8	179 661.3
Alberta imports	41 569.7	50 717.9	50 878.3	52 253.2	27 134.2	32 792.8	48 415.8	43 432.0	45 963.9	48 612.9	51 865.6	40 388.1	534 024.4
Total supply	58 537.1	63 537.0	66 189.8	67 088.8	39 313.4	45 461.3	62 469.1	58 232.4	60 543.8	64 785.7	69 029 9	58 472.9	713 685.7
Disposition													
Inventory change	1 801.6	− 1 245.0	512.7	− 86.5	− 439.3	629.2	− 929.7	972.1	− 1 565.0	1 299.5	1 483.0	− 1 379.9	1 052.7
Transfers	2 083.7	1 511.6	1 900.7	1 602.7	1 999 8	− 1 837.7	− 1 287.8	− 1 196.2	56.6	− 1 153.4	− 1 180.1	− 859.6	1 640.3
Losses and adjustments	283.8	48.9	− 20.8	− 13.7	95.1	82.1	225.2	− 94.5	− 125.5	119.2	65.1	37.0	726.4
Sales of British Columbia production—													
British Columbia	12 686.5	12 503.6	12 799.5	12 443.0	9 626.7	10 271.2	11 729.9	12 170.3	13 540.9	15 793.4	16 796.3	20 287.3	160 648.6
Alberta	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Northwest Territories	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
United States of America	111.8	.....	119.4	890.1	896.9	3 523.7	4 315.7	2 948.7	2 672.9	114.1	.....	.....	15 593.3
Offshore	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
Total British Columia	12 798.3	12 503.6	12 918.9	13 333.1	10 523 6	13 794.9	16 045.6	15 119.0	16 213.8	15 907.5	16 796.3	20 287.3	176 241.9
Sales of Alberta production—													
British Columbia	20 603.0	21 259.8	10 680.0	12 377.7	10 127.4	9 680.7	6 832.5	7 066.6	13 450.6	21 842.4	24 144.9	14 817.2	172 882.8
Offshore	20 966.7	29 458.1	40 198.3	39 875.5	17 006.8	23 112.1	41 583.3	36 365.4	32 513.3	26 770.5	27 720.7	25 570.9	361 141.6
Total	41 569.7	50 717.9	50 878.3	52 253.2	27 134.2	32 792.8	48 415.8	43 432.0	45 963.9	48 612.9	51 865.6	40 388.1	534 024.4
Total sales	54 368.0	63 221.5	63 797.2	65 586.3	37 657.8	46 587.7	64 461.4	58 551.0	62 177.7	64 520.4	68 661.9	60 675.4	710 266.3
Total disposition	58 537.1	63 537.0	66 189.8	67 088.8	39 313.4	45 461.3	62 469.1	58 232.4	60 543.8	64 785.7	69 029.9	58 472.9	713 685.7

Table P12—Monthly Supply and Disposition of Butanes, 1981

(Volumes in m^3 at 15°C)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Supply													
British Columbia production—													
Plant	8 132.9	7 004.4	5 117.2	6 597.1	7 415.2	6 206.4	6 087.3	6 711.4	5 905.7	7 829.0	8 303.8	8 908.1	84 634.7
Refinery	3 663.0	5 419.9	7 331.5	8 552.3	7 660.0	10 963.8	8 786.8	8 768.1	8 143.5	5 708.6	4 674.7	2 610.3	82 282.5
Totals British Columbia	11 795.9	12 424.3	12 448.7	15 149.4	15 075.2	17 170.2	14 874.1	15 479.5	14 049.2	13 537.6	12 978.5	11 518.4	166 917.2
Alberta imports	370.2	375.3	.....	.....	.....	.....	.....	.....	118.1	718.4	1 104.7	1 589.1	3 530.3
Total supply	12 166.1	12 799.6	12 448.7	15 149.4	15 075.2	17 170.2	14 874.1	15 479.5	14 167.3	14 256.0	14 083.2	13 107.5	170 447.5
Disposition													
Inventory change	293.7	330.2	−2 129.6	347.0	437.0	662.7	67.7	−481.2	−1 338.5	−415.4	1 354.6	−622.8	−1 494.6
Gasoline blending	1 346.6	1 045.3	1 078.9	406.6	505.5	1 013.7	708.8	407.5	675.3	−374.0	1 710.1	1 679.1	10 619.6
Losses and adjustments	−379.4	1 057.2	181.2	−46.5	3.4	112.8	86.1	−85.2	−27.2	−12.1	425.1	−.8	1 314.6
Sales of British Columbia production —													
British Columbia	5 993.4	5 611.7	7 216.2	7 997.2	7 625.3	10 598.1	9 120.1	10 633.1	8 280.9	6 205.2	2 767.2	3 493.4	85 541.8
Alberta	.....	.....	.....	.....	.....	.....	474.3	.....	.....	.....	.....	.....	474.3
United States of America	4 541.6	4 379.9	6 102.0	6 445.1	6 504.0	4 782.9	4 417.1	5 005.3	6 458.7	8 133.9	6 721.5	6 969.5	70 461.5
Total	10 535.0	9 991.6	13 318.2	14 442.3	14 129.3	15 381.0	14 011.5	15 638.4	14 739.6	14 339.1	9 488.7	10 462.9	156 477.6
Sales of Alberta production—													
British Columbia	370.2	375.3	.....	.....	.....	.....	.....	.....	118.1	718.4	1 104.7	1 589.1	3 530.3
Total sales	10 905.2	10 366.9	13 318.2	14 442.3	14 129.3	15 381.0	14 011.5	15 638.4	14 857.7	15 057.5	10 593.4	12 052.0	160 007.9
Total disposition	12 166.1	12 799.6	12 448.7	15 149.4	15 075.2	17 170.2	14 874.1	15 479.5	14 167.3	14 256.0	14 083.2	13 107.5	170 447.5

Table P13—Monthly Supply and Disposition of Sulphur, 1981

(Volumes in Metric Tonnes)

	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Totals
Supply													
British Columbia production	20 588.1	28 540.4	29 858.0	18 615.2	17 405.4	8 444.9	6 112.1	5 951.1	12 166.3	20 186.9	19 743.6	21 651.0	209 276.3
Disposition													
Inventory change	6 394.9	8 120.2	9 437.7	3 069.1	389.2	– 1 142.9	1 395.0	– 12 411.3	– 11 888.8	– 10 327.0	– 17 535.8	– 6 748.6	– 34 791.6
Sales—													
North America	12 612.2	19 464.3	19 464.4	15 101.4	16 056.3	8 356.8	4 611.2	.....	2 952.0	7 189.8	829.0	16 171.0	126 365.0
Offshore	1 581.0	955.9	955.9	444.7	959.9	1 231.0	105.9	18 362.4	21 103.1	23 324.1	36 450.4	12 228.6	117 702.9
Totals	14 193.2	20 420.2	20 420.3	15 546.1	17 016.2	9 587.8	4 717.1	18 362.4	24 055.1	30 513.9	37 279.4	28 399.6	244 067.9
Total disposition	20 588.1	28 540.4	29 858.0	18 615.2	17 405.4	8 444.9	6 112.1	5 951.1	12 166.3	20 186.9	19 743.6	21 651.0	209 276.3

Table P14—Crude-oil Pipelines, 1981

Company	Fields Served	Main and Lateral Lines		Pumping Stations No.	Present Capacity m^3/day	Gathering Capacity	Lines km	Throughput m^3/day	Storage Capacity m^3
		Size, mm	Length, km						
Suncor Inc.	Aitken Creek, Blueberry	323.9	3.8	—	—	—	—	—	—
		219.1	1002.0	1	795	1 908	62.4	265	10 334
	Fort St. John	—	—	—	—	—	—	29	159
	Inga	168.3	2.7	1	1 987	1 987	—	653	—
	Stoddart	—	—	—	—	—	—	12	—
CDC Oil and Gas Limited	Inga	168.3	5.1	2	1 240	—	—	200	—
		114.3	14.0	1	1 590	1 590	22.2	300	—
		88.9	3.2	1	254	—	—	—	—
Norcen Energy Resources Limited	Beatton River, Beatton River West, Boundary Lake, Bulrush, Currant, Eagle, Milligan Creek, Peejay, Weasel, Wildmint, Willow, Wolf.	—	—	30	12 100	8 267[1]	60.0	4 800	22 260
		323.9	62.8	—	—	7 154[2]	—	—	—
		219.1	173.8	—	—	—	—	—	—
		168.3	53.4	—	—	—	—	—	—
		114.3	127.5	—	—	—	—	—	—
Westcoast Petroleum Ltd.	.....	323.9	815.8	12	11 129	11 129	—	4 624	93 167

[1] Boundary Lake.
[2] Terminal to Westcoast Petroleum Ltd.

Table P15—Crude-oil Refineries, 1981

Name	Location	Type	Year of First Operation	Source of Crude	Crude-oil Capacity m^3/calendar day	Storage Capacity m^3	Cracking Plant Units	Cracking Capacity m^3/calendar day	Other Units
Chevron Canada Ltd.	North Burnaby	Complete	1936	B.C. and Alberta	5 960	309 390	Catalytic fluid	1 350	Catalytic polymerization, catalytic reformer, lube-oil blending plant, asphalt, sulphur recovery.
Gulf Canada Products Company	Kamloops	Complete	1954	B.C. and Alberta	1 480	99 685	Catalytic fluid	445	Catalytic polymerization, catalytic reformer, distillate, desulphurization, merox, asphalt, naptha.
Gulf Canada Products Company	Port Moody	Complete	1958	B.C. and Alberta	5 915	280 295	Catalytic fluid	1 815	Catalytic reformer, distillate, desulphurization, alkylation sulphuric acid, napthadesulphurization, merox, sulphur.
Husky Oil Limited	Prince George	Complete	1967	B.C.	1 590	152 000	Catalytic fluid	475	Unifiner, reformer, asphalt, sulphur, gas concentration.
Imperial Oil Limited	Ioco	Complete	1915	B.C. and Alberta	6 465	485 705	Catalytic fluid	1 955	Catalytic polymerization, powerformer, tuluene extraction, sulphur, LPG plant, desulphurization.
Petro-Canada	Taylor	Complete	1960	B.C.	2 860	202 000	Catalytic fluid	980	H.F. alkylation, asphalt, pentane splitter, platformer unifiner, HDS unit, DDS unit.
Shell Canada Limited	North Burnaby	Complete	1932	B.C. and Alberta	4 200	370 000	Catalytic fluid	1 000	Catalytic polymerization, platformer, vacuum flashing, solvent fractination, distillate hydrotreater, sulphur recovery, asphalt.

Table P16—Natural Gas Pipelines, 1981

Company	Source of Natural Gas	Transmission Lines		Compressor Stations		Present Daily Capacity 10^3m^3	Gathering and Distribution Lines		Areas Served by Distributors
		Size mm	km	No.	Power Watts 10^6		Size mm	km	
British Columbia Hydro and Power Authority	Westcoast Transmission Co. Ltd.	1 006.8	29.9	—	—	27 840.0	—	7 183.9	Lower Mainland of British Columbia.
		762.0	68.3	—	—	—	—	—	
		610.0	30.1	—	—	—	—	—	
		508.0	75.3	—	—	—	—	—	
		457.0	31.2	—	—	—	—	—	
		406.4	28.0	—	—	—	—	—	
		323.9	84.7	—	—	—	—	—	
		273.1	23.0	—	—	—	—	—	
		219.1	45.9	—	—	—	—	—	
		168.3	49.4	—	—	—	—	—	
		114.3	20.5	—	—	—	—	—	
Columbia Natural Gas Ltd.		219.1	89.3	—	—	2 428.0	219.1	2.9	Cranbrook, Fernie, Kimberley, Creston, Sparwood, Elk Valley, Skookumchuck, Elko, Elkford, Yahk, and Galloway.
		168.3	113.8	—	—	—	168.3	9.5	
		114.3	32.3	—	—	—	114.3	18.5	
		88.9	45.2	—	—	—	88.9	43.1	
		60.3	9.8	—	—	—	60.3	81.6	
		—	—	—	—	—	42.2	109.8	
		—	—	—	—	—	26.3	0.2	
		—	—	—	—	—	—	—	
Inland Natural Gas Co.	Westcoast Transmission Co. Ltd.	323.9	575.3	3	4.92	5 240.0	219.1	20.6	Peace River, Prince George, Cariboo, Thompson, Okanagan, and Kootenay areas.
		273.1	191.7	—	—	—	168.3	73.5	
		219.1	53.8	—	—	—	114.3	411.1	
	Alberta and Southern Gas Co. Limited	168.3	188.4	—	—	—	88.9	140.0	
		114.3	265.6	—	—	—	60.3	1 197.8	
		88.9	113.0	—	—	—	48.3	33.1	
		60.3	134.5	—	—	—	42.2	745.7	
		48.3	0.2	—	—	—	—	—	
		42.2	2.2	—	—	—	—	—	
Northland Utilities (BC) Ltd.	Peace River Transmission Co.	88.9	3.2	—	—	282.0	273.1	0.6	Dawson Creek, Pouce Coupe, and Rolla.
		60.3	0.6	—	—	—	219.1	2.6	
		42.2	5.1	—	—	—	168.8	4.8	
		—	—	—	—	—	114.3	21.1	
		—	—	—	—	—	88.9	9.2	
		—	—	—	—	—	60.3	44.0	
		—	—	—	—	—	48.3	2.3	
		—	—	—	—	—	42.2	32.4	
		—	—	—	—	—	26.7	3.3	

Pacific Northern Gas Ltd.	Westcoast Transmission Co. Ltd.	323.9	42.8	1	13.73	2 625.0	168.3	5.1	
		219.1	206.1	—	—	—	114.3	18.0	
		168.3	58.0	—	—	—	88.9	34.0	
		114.3	22.5	—	—	—	60.3	91.5	
		101.6	101.6	—	—	—	42.2	82.3	
		73.0	28.6	—	—	—	26.7	71.9	
		60.3	84.3	—	—	—	21.3	0.3	
Peace River Transmission	Westcoast Transmission	168.3	9.4	—	—	—	—	—	
Plains Western Gas & Electric Co. Ltd.	Westcoast Transmission Co. Ltd.	168.3	0.5	—	—	338.0	114.3	37.7	
		114.3	33.6	—	—	—	88.9	12.7	
		88.9	7.4	—	—	—	73.0	5.8	
		60.3	3.2	—	—	—	60.3	119.7	
		—	—	—	—	—	48.3	16.0	
		—	—	—	—	—	42.2	1.1	
		—	—	—	—	—	33.4	25.2	
		—	—	—	—	—	26.7	20.2	
Westcoast Transmission Co. Ltd.	Alberta	660.0	52.3	—	—	6 057.0	—	—	
	Taylor-Willow Flats	914.0	37.3	—	—	—	—	—	
		660.0	122.8	—	—	—	—	—	
	Willow Flats-Huntington	660.0	917.8	13	208.53	38 317.0	—	—	
		914.0	789.2	—	—	—	—	—	
	Aitken Creek	—	—	—	—	—	323.9	31.4	
	Alaska Highway system	—	—	—	—	—	660.0	60.4	
		—	—	—	—	—	508.0	29.1	
		—	—	—	—	—	457.0	28.8	
		—	—	—	—	—	323.9	15.9	
	Beaver River system	610.0	178.5	1	29.08	7 607.0	—	—	
	Beg field	—	—	—	—	—	406.4	44.1	
		—	—	—	—	—	168.3	9.5	
	Blueberry West field	—	—	—	—	—	219.1	10.8	
	Boundary Lake field	—	—	1	2.98	—	406.4	51.3	
		—	—	—	—	—	168.3	4.7	
	Bubbles field	—	—	1	0.49	—	—	—	
	Buick Creek field	—	—	—	—	—	660.0	2.9	
		—	—	—	—	—	273.1	11.7	
	Buick Creek East field	—	—	—	—	—	219.1	10.6	
	Buick Creek West field	—	—	1	1.48	—	508.0	26.1	
	Bullmoose field	—	—	—	—	—	219.1	13.0	
	Cache Creek field	—	—	—	—	—	168.3	13.8	
	Charlie Lake field	—	—	—	—	—	168.3	3.7	
	Clarke Lake field	—	—	—	—	—	406.4	44.7	
	Clarke Lake South field	—	—	—	—	—	219.1	18.4	
	Dawson Creek field	—	—	—	—	—	219.1	8.7	
	Fireweed field	—	—	—	—	—	273.1	24.6	
		—	—	—	—	—	168.3	6.8	
		—	—	—	—	—	101.6	8.0	
	Flatrock field	—	—	—	—	—	101.6	8.0	
	Fort St. John field	—	—	3	1.48	—	457.0	12.6	
		—	—	—	—	—	273.1	1.4	
		—	—	—	—	—	219.1	1.1	

Table P16—Natural Gas Pipelines, 1981—Continued

Company	Source of Natural Gas	Transmission Lines		Compressor Stations		Present Daily Capacity 10^3m^3	Gathering and Distribution Lines		Areas Served by Distributors
		Size mm	km	No.	Power Watts 10^6		Size mm	km	
	Fort St. John Southeast field	323.9	11.3	—	—	—	323.9	6.4	
	Fort Nelson plant	660.0	355.3	4	69.65	24 173.0	—	—	
	Fort Nelson-Willow Flats	914.0	74.8	—	—	—	—	—	
	Gundy Creek field	—	—	—	—	—	273.1	9.8	
	Grizzly field	—	—	—	—	—	610.0	56.5	
		—	—	—	—	—	508.0	82.7	
		—	—	—	—	—	273.1	14.8	
	Helmet field	—	—	—	—	—	406.4	50.5	
		—	—	—	—	—	273.1	20.3	
		—	—	—	—	—	219.1	5.8	
	Jedney and Bubbles fields	—	—	—	—	—	323.9	50.7	
	Junior and Sierra fields	—	—	—	—	—	273.1	11.3	
		—	—	—	—	—	609.6	62.5	
		—	—	—	—	—	406.4	58.2	
		—	—	—	—	—	323.9	13.1	
	Kobes-Townsend field	—	—	1	4.45	—	323.9	30.4	
		—	—	—	—	—	219.1	8.9	
	Kotcho Lake field	—	—	—	—	—	323.9	15.6	
	Kotcho Lake East field	—	—	—	—	—	273.1	18.5	
	Laprise Creek field	—	—	1	3.85	—	323.9	38.3	
		—	—	—	—	—	168.3	4.0	
	Milligan-Peejay system	—	—	1	2.98	—	323.9	51.8	
		—	—	—	—	—	273.1	37.7	
		—	—	—	—	—	219.1	21.2	
		—	—	—	—	—	168.3	10.9	
	Monias field	—	—	—	—	—	219.1	32.6	
	Montney field	—	—	—	—	—	114.3	11.9	
	Nig field	—	—	—	—	—	406.4	45.5	
		—	—	—	—	—	168.3	3.7	
	Oak field	—	—	—	—	—	406.4	33.3	
		—	—	—	—	—	168.3	1.4	
	Parkland field	—	—	—	—	—	219.1	10.8	
	Petitot-Louise system	—	—	—	—	—	273.1	19.0	
		—	—	—	—	—	323.9	25.4	
		—	—	—	—	—	406.4	10.5	
		—	—	—	—	—	508.0	41.7	
	Red Creek field	—	—	—	—	—	114.3	12.4	
	Rigel field	—	—	1	5.07	—	323.9	17.9	
		—	—	1	1.04	—	273.1	18.5	
	Rigel North field	—	—	—	—	—	168.3	10.6	
	Sierra field	—	—	—	—	—	323.9	10.9	
		—	—	—	—	—	406.4	10.9	
	Silver-Dahl area	—	—	—	—	—	406.4	72.1	
		—	—	—	—	—	273.1	62.3	
		—	—	—	—	—	219.1	10.1	
		—	—	—	—	—	168.3	9.7	
	Stoddart field	—	—	1	1.04	—	219.1	10.1	
	Yoyo field	—	—	—	—	—	610.0	77.2	

[1] Boundary Lake.
[2] Terminal to Westcoast Petroleum Ltd.

Table P17—Processing Plants, 1981

Operator	Location	Fields Served	Plant Type	Year of First Operation	Plant Capacity 10^3m^3/Day		Natural Gas Liquids	Residual Gas to—
					In	Out		
BP Exploration Canada Limited	Unit 77, Block E, NTS Map 93-P-3	Bullmoose	Inlet separator, Mole sieve, dehydration, DEA glycol fuel gas treating	1980	2 002	1 974		Westcoast Transmission Co. Ltd.
BP Exploration Canada Limited	Unit 65, Block B, NTS Map 93-P-5	Sukunka and Sukunka West	Inlet separator, Mole sieve, dehydration, DEA glycol fuel gas treating	1980	2 564	2 536		Westcoast Transmission Co. Ltd.
Esso Resources Canada	SE ¼, Sec. 2, Tp. 85, Rge. 14, W6M	Boundary Lake	Inlet separator, MEA absorption, treating, glycol absorption, dehydration, combined refrigeration and oil absorption, natural gas liquid recovery distillation	1964	590	480	Pentanes plus, propane-butane mix	Westcoast Transmission Co. Ltd.
Mobil Oil of Canada Ltd.	Unit 91, Block D, NTS Map 94-I-14	Sierra and Sahtaneh	Inlet separator, dry desiccant dehydration	1969	8 761	8 705		Westcoast Transmission Co. Ltd.
Petro-Canada	Sec. 36, Tp. 82, Rge. 18, W6M	All B.C. producing gas fields except Parkland and Boundary Lake that are between 56° and 58° latitude	Inlet separator, MEA treating, dry desiccant dehydration, oil absorption, distillation	1957	14 200	12 900	Condensate, pentanes plus, propanes, butanes	Westcoast Transmission Co Ltd.
Quasar Petroleum Ltd.	Unit 74, Block G, NTS Map 93-I-15	Grizzly North, Unit 1	Inlet separator, TEG dehydration, inlet compression	1978	1 416	1 416		Westcoast Transmission Co. Ltd.
	Unit 74, Block G, NTS Map 93-I-15	Grizzly North, Unit 2	Inlet separator, molecular sieve, dehydration	1980	2 400	2 400		Westcoast Transmission Co. Ltd.
	Unit 25, Block A, NTS Map 93-I-15	Grizzly South	Inlet separator, TEG dehydration, inlet compression	1980	1 416	1 416		Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	NW ¼, Sec. 10, Tp. 85, Rge. 14, W6M	Boundary Lake	MEA absorption dehydration	1961	279	265	Condensate	Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	Unit 85, Block G, NTS Map 94-J-10	All B.C. producing gas fields including Sierra and Sahtaneh north of 58° latitude	Potassium carbonate, MEA DEA absorption, dehydration	1965	27 845	22 654		Westcoast Transmission Co. Ltd.
Westcoast Transmission Co. Ltd.	Unit 85, Block D, NTS Map 93-P-12	Grizzly, Sukunka, and Bullmoose	Sulfinol gas sweetening dehydration	1980	7 365	5 843		

Table P18—Sulphur Plants, 1981

Name	Location	Raw Material	Principal Product	Year of First Operation	Capacity Tonnes/Day
Westcoast Transmission Co. Ltd.	Taylor	Hydrogen sulphide	Sulphur	1957	264
Westcoast Transmission Co. Ltd.	Fort Nelson	Hydrogen sulphide	Sulphur	1976	406
Westcoast Transmission Co. Ltd.	Pine River	Hydrogen sulphide	Sulphur	1980	1 074

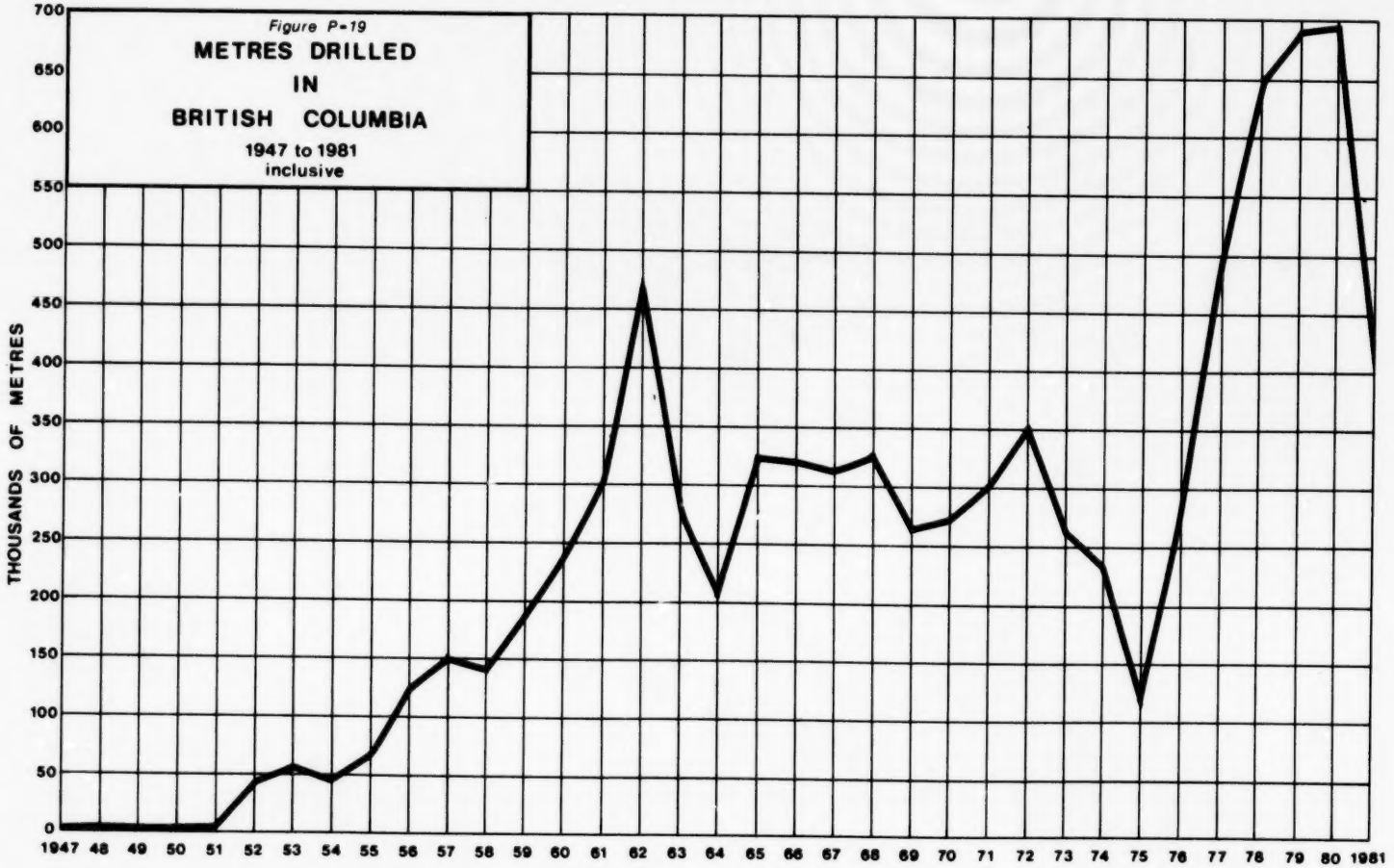
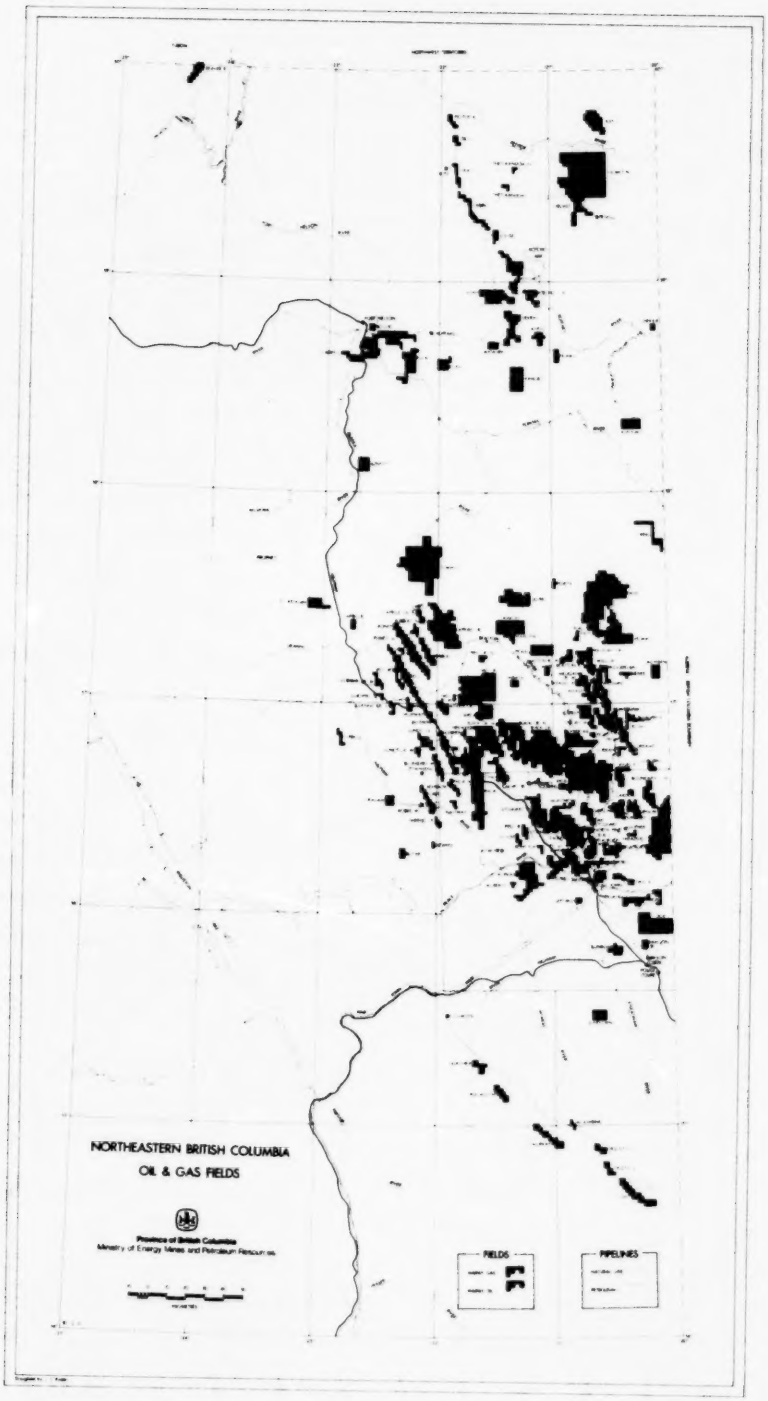


Figure P-19
METRES DRILLED
IN
BRITISH COLUMBIA
1947 to 1981
inclusive
THOUSANDS OF METRES
700
650
600
550
500
450
400
350
300
250
200
150
100
50
0
1947 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 1981


NORTHEASTERN BRITISH COLUMBIA
OIL & GAS FIELDS
Province of British Columbia
FIELDS
PIPELINES

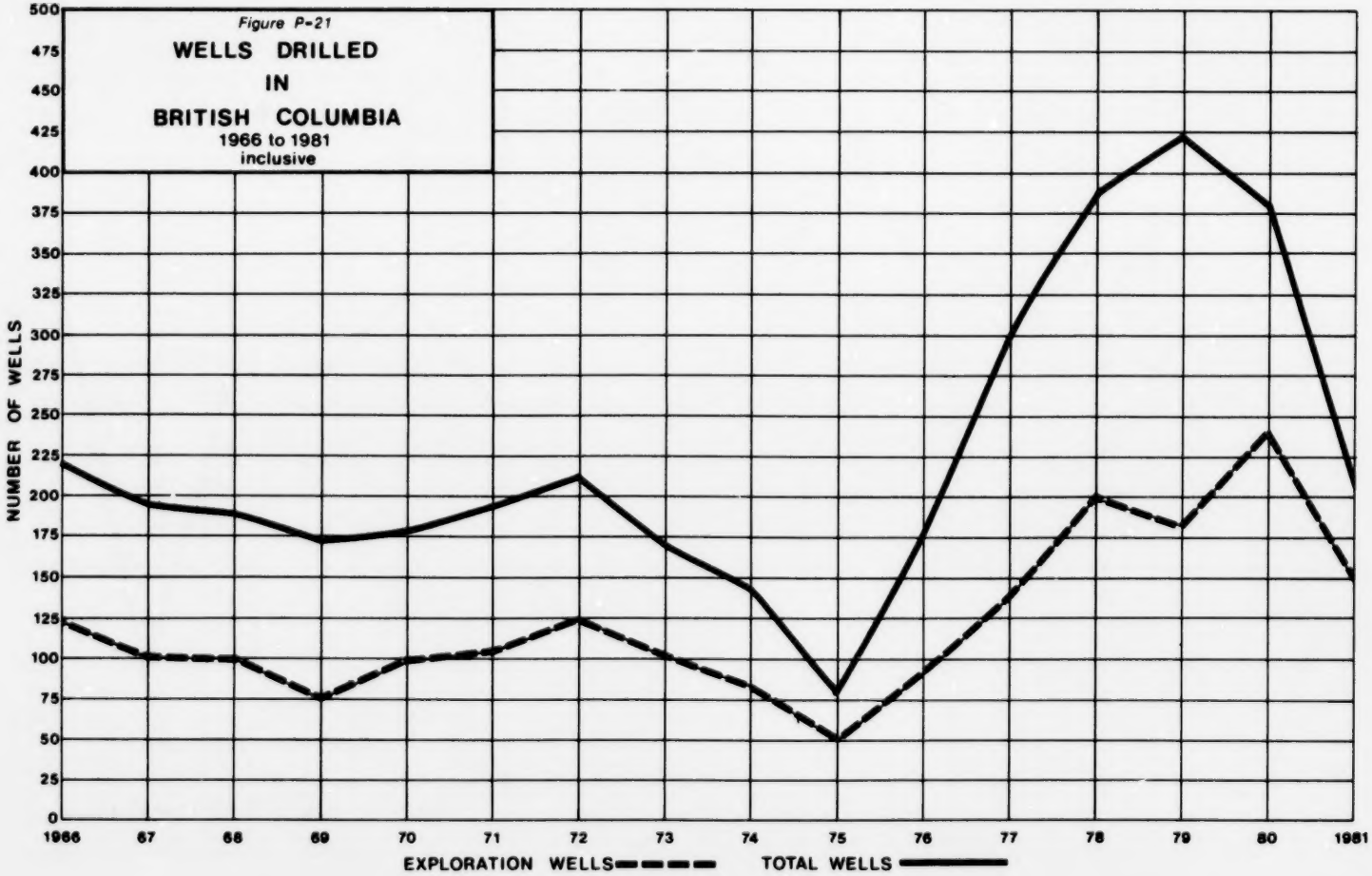


Figure P-21
WELLS DRILLED
IN
BRITISH COLUMBIA
1966 to 1981
inclusive
NUMBER OF WELLS
500
475
450
425
400
375
350
325
300
275
250
225
200
175
150
125
100
75
50
25
0
1966
67
68
69
70
71
72
73
74
75
76
77
78
79
80
1981
EXPLORATION WELLS
TOTAL WELLS

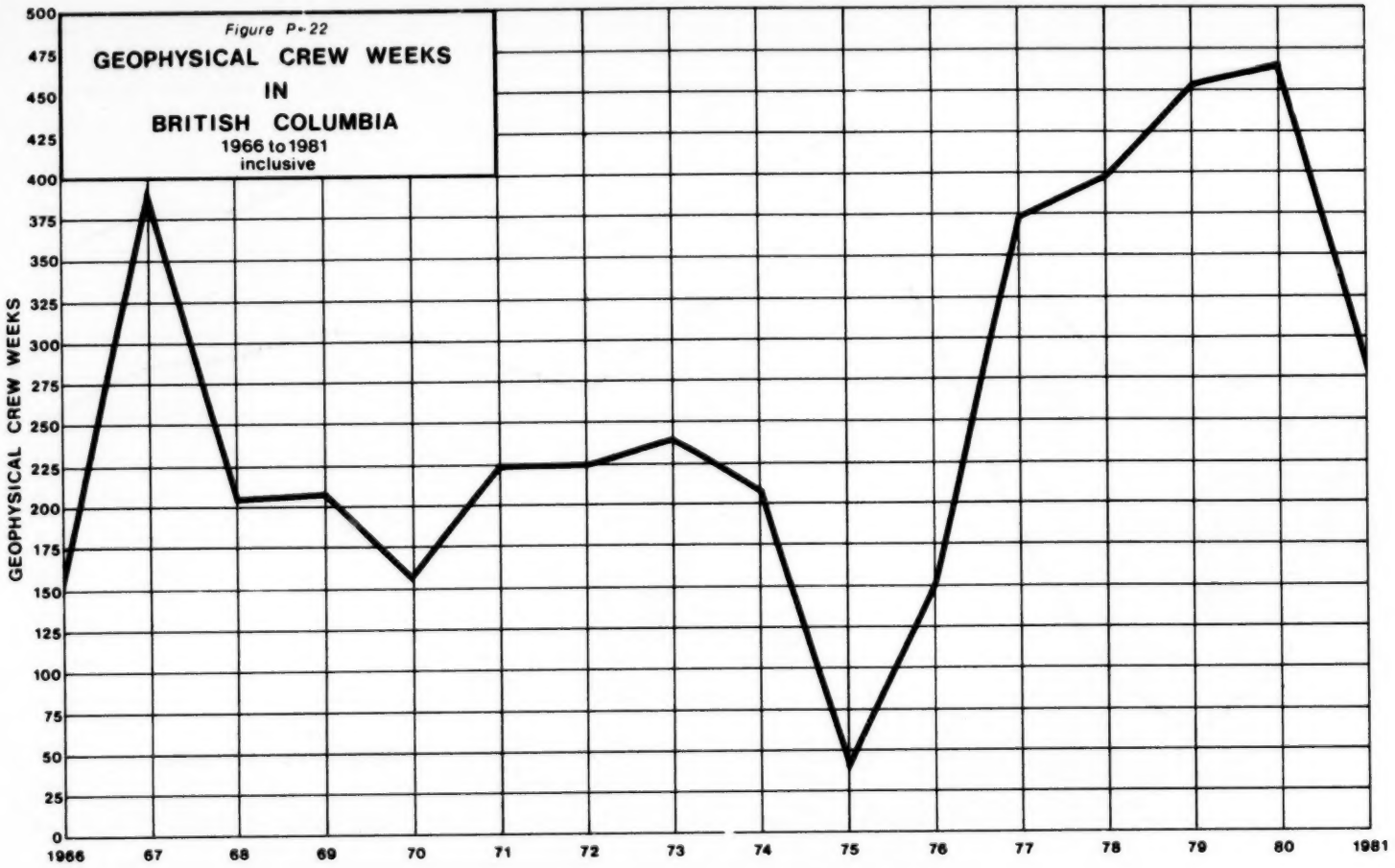


Figure P-22
GEOPHYSICAL CREW WEEKS
IN
BRITISH COLUMBIA
1966 to 1981
inclusive
GEOPHYSICAL CREW WEEKS
500
475
450
425
400
375
350
325
300
275
250
225
200
175
150
125
100
75
50
25
0
1966
67
68
69
70
71
72
73
74
75
76
77
78
79
80
1981

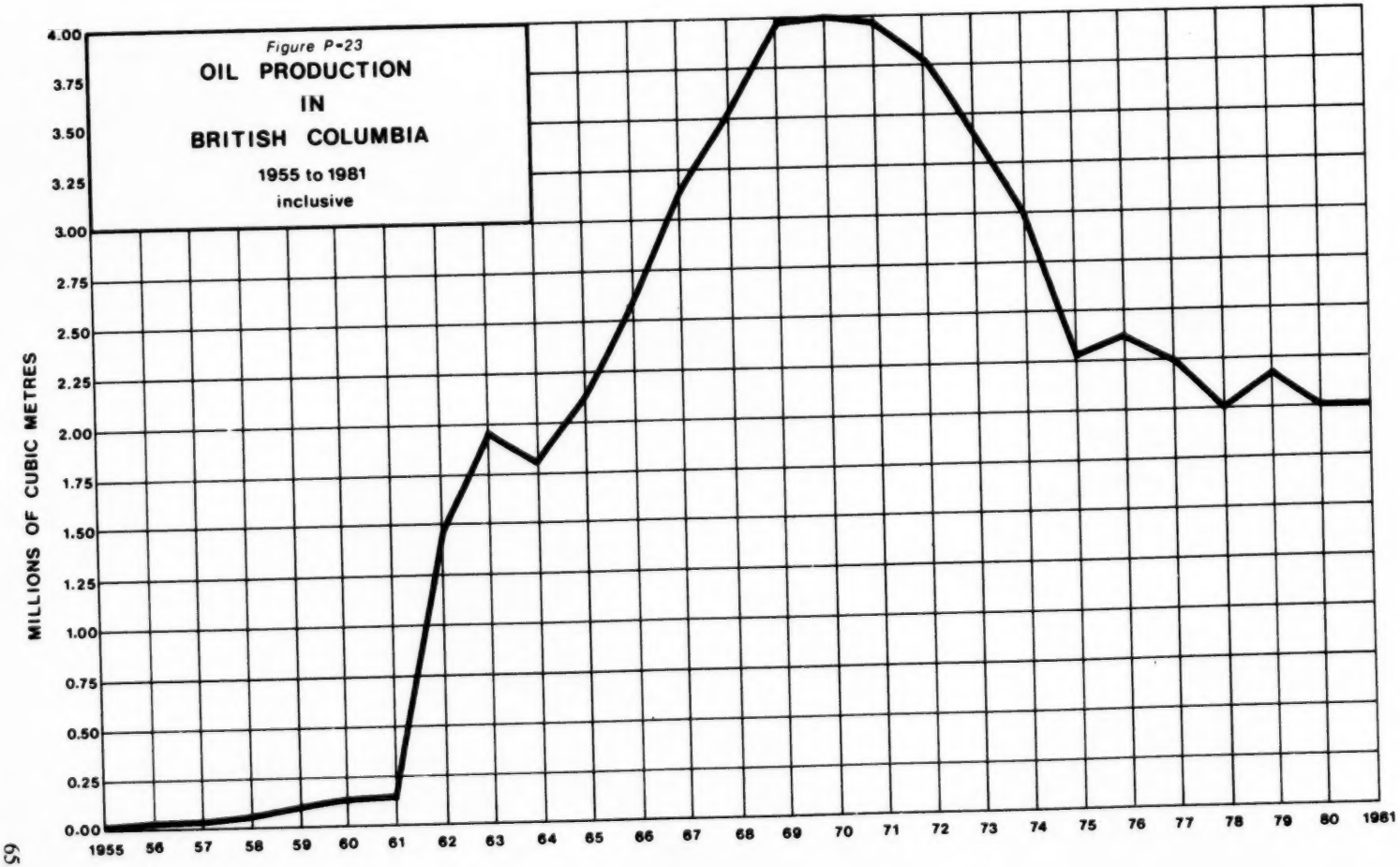


Figure P-23
OIL PRODUCTION
IN
BRITISH COLUMBIA
1955 to 1981
inclusive
MILLIONS OF CUBIC METRES
4.00
3.75
3.50
3.25
3.00
2.75
2.50
2.25
2.00
1.75
1.50
1.25
1.00
0.75
0.50
0.25
0.00
1955 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 1981

Figure P-24

MARKETABLE BRITISH COLUMBIA GAS

1955 to 1981 inclusive

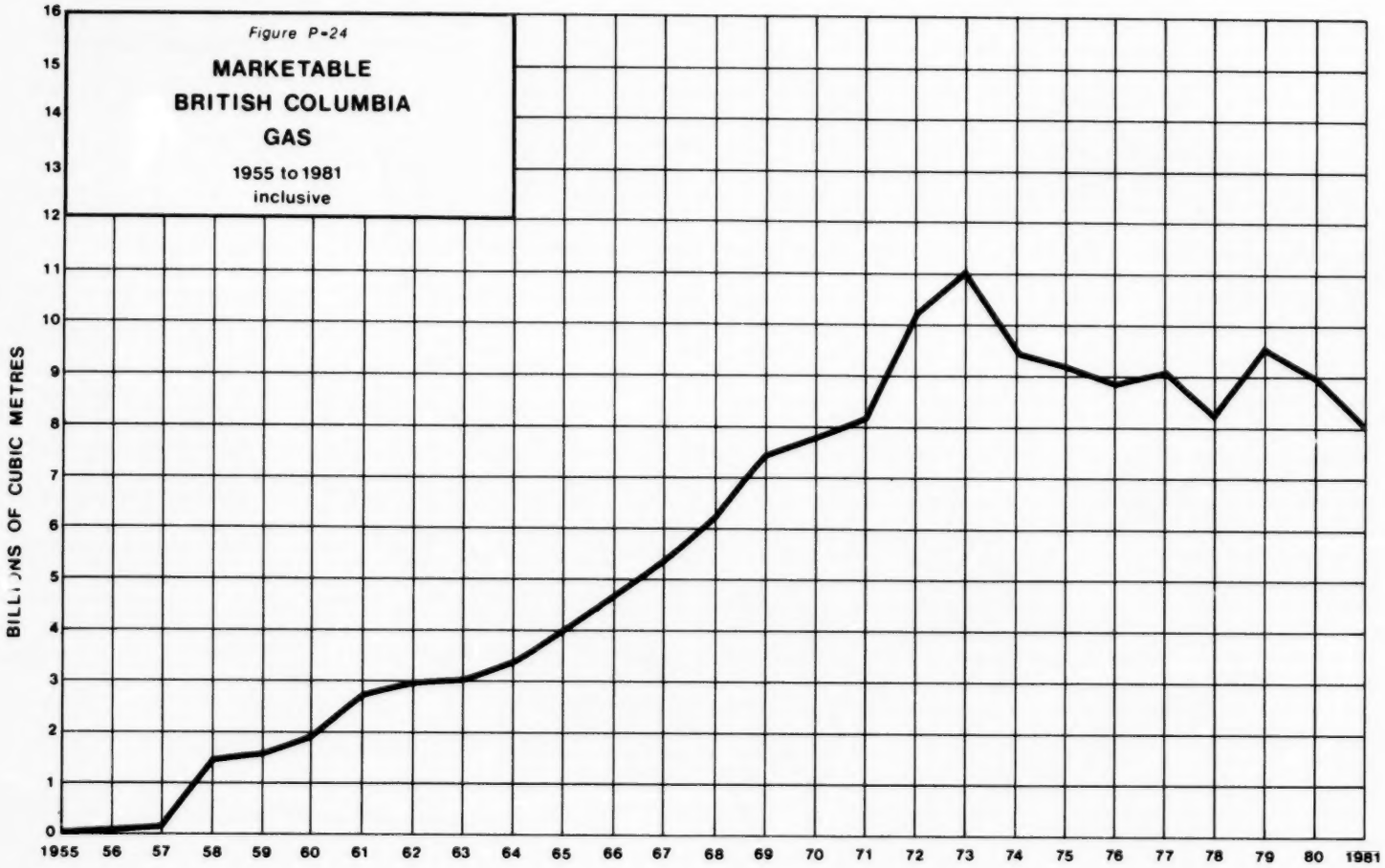


Figure P-25
PIPELINES
and
SEDIMENTARY BASINS
of
BRITISH COLUMBIA